

19980118.qrp v00_n974.qrs.980118

Date: Sun, 18 Jan 1998 19:03:11 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 974

QRP-L Digest 974

Topics covered in this issue include:

- 1) [1246] Re: Tuna Tin 2, CB Slider & Herring Aid 5
by Monte Stark <ku7y@sage.dri.edu>
- 2) [1247] FOX SPOT
by "tom palmer" <n1tp@worldnet.att.net>
- 3) [1248] fox spot w2mby
by Conard Murray <ws4s@InfoAve.Net>
- 4) [1249] Re: Hamstick to Bugcatcher conversion...
by Steve Galchutt <n0tu@webaccess.net>
- 5) [1250] Keyer wiring convention
by Bob Roach <KE4Q0K@worldnet.att.net>
- 6) [1251] Re: Keyer wiring convention
by Paul Erickson <paul1@wizard.ucsf.sfu.ca>
- 7) [1252] Extruded enclosures
by Bensondj@aol.com
- 8) [1253] Re: ironon pcb
by Steven Weber <kd1jv@moose.ncia.net>
- 9) [1254] Centennial 20 SSB
by "L. Jeffrey Hetherington" <jhetheri@freenet.npiec.on.ca>
- 10) [1255] No FOX in NH
by N10DL <N10DL@aol.com>
- 11) [1256] Re: What CW Tone Do You Prefer?
by "Robert J. Gobrick" <rgobrick@worldnet.att.net>
- 12) [1257] Re: Doug DeMaw
by "Robert J. Gobrick" <rgobrick@worldnet.att.net>
- 13) [1258] Re: TunaTin2 Circad File
by wa8rxi@juno.com (Richard C Arzadon)
- 14) [1259] DISCONTINUE qrp-l@Lehigh.EDU
by JerryK0DU <JerryK0DU@aol.com>
- 15) [1260] Re: DISCONTINUE qrp-l@Lehigh.EDU
by Paul Harden <pharden@aoc.nrao.edu>
- 16) [1261] International Call Lookup
by Ka0yos <Ka0yos@aol.com>
- 17) [1262] Re: DISCONTINUE qrp-l@Lehigh.EDU
by wp4jxd@prtc.net (wp4jxd)
- 18) [1263] Re: DISCONTINUE qrp-l@Lehigh.EDU
by wp4jxd@prtc.net (wp4jxd)
- 19) [1264] Lost Files

- by KF4EIB <KF4EIB@aol.com>
- 20) [1265] Re: Dan's Small Parts Question
by Bill Jones <kd7s@psnw.com>
- 21) [1266] ARRL RTTY Roundup QRP Style
by Bill Jones <kd7s@psnw.com>
- 22) [1267] Nostalgia QRP
by "Harley L. Miller" <hmliller@sound.net>
- 23) [1268] FYBO
by N4JS <n4js@pobox.com>
- 24) [1269] Re: It's Official
by "Frank A. West" <ke6vhm@earthlink.net>
- 25) [1270] qrp rtty
by mike@krypton.nmr.Hawaii.Edu (Mike W. Burger)
- 26) [1271] What CW tone do you prefer? (kinda long)
by Jon Iza <iapizloj@biccc00.bi.ehu.es>
- 27) [1272] Re: What CW tone do you prefer? (kinda long)
by "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
- 28) [1273] Re: Getting CAD files into JPEG/GIF/TIFF/etc.
by "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
- 29) [1274] Re: qrp rtty
by "Claton Cadmus" <aplitech@spacestar.net>
- 30) [1275] Keyer
by MSU1972 <MSU1972@aol.com>
- 31) [1276] who
by "KB8TJX" <kb8tjx@raex.com>
- 32) [1277] Another JPG Question
by Jay & Jackie <jayboy@psnw.com>
- 33) [1278] Sierra Shaped Keying Question
by Paul Stroud <aa4xx@ipass.net>
- 34) [1279] Re: qrp rtty
by Marty Ray <mray@netusa1.net>
- 35) [1280] FOX: Fox Hunt Results W2MBY
by W2MY & W2MBY <n2mnn@spacegate.com>
- 36) [1281] Twilight Zone e-mail
by kd7s@psnw.com (Bill Jones)
- 37) [1282] JPG Problem Solved
by Jay & Jackie <jayboy@psnw.com>
- 38) [1283] Foxx 2 Xcvt
by David Gauding <david.gauding@bbs.galilei.com>
- 39) [1284] Not QRP but good advice.
by "Ron Polityka" <wb3aal@talon.net>
- 40) [1285] Reception Report for WA2HOQ
by maprath@prairienet.org (Mark A. Prather)
- 41) [1286] Sierra Output Transformer
by Derek Brown <DBrown@RFMD.com>
- 42) [1287] [v31xe@dzdn.com: MARS & CAP]
by af852@rgfn.epcc.Edu (William R Colbert)
- 43) [1288] Re: What CW tone do you prefer? (kinda long)

- by Leon Heller <leon@lfheller.demon.co.uk>
- 44) [1289] Care and Feeding of Deep Cycle Batteries
by k7sz@juno.com
- 45) [1290] 2n2: 40 m DSB XCVR complete in VA
by "Ralph L. Irons" <rli8m@weyl.math.virginia.edu>
- 46) [1291] Re: Keyer wiring convention
by Monte Stark <ku7y@sage.dri.edu>
- 47) [1292] Re: FOX: Fox Hunt Results W2MBY
by "Roger Whitaker [K9LJB]" <k9ljb@iname.com>
- 48) [1293] Re: qrp rtty
by Monte Stark <ku7y@sage.dri.edu>
- 49) [1294] LDE for e-mail..
by "Roger Whitaker [K9LJB]" <k9ljb@iname.com>
- 50) [1295] Re: Care and Feeding of Deep Cycle Batteries (long)
by Andy Fox <foxes@theriver.com>
- 51) [1296] iron-on pcb
by dave_epps@juno.com
- 52) [1297] Re: outback make-do antennas
by "\"W. Kimura\"." <W.Kimura@valley.net>
- 53) [1298] Re: Hamstick=Bugcatcher Lite (long)
by Steve Galchutt <n0tu@webaccess.net>
- 54) [1299] a bit more old and new
by "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
- 55) [1300] W2MBY Fox
by gsurrency@juno.com (Gary L Surrency)
- 56) [1301] Knob twister's special
by "Terry Bassett" <mutabut@net66.com>
- 57) [1302] preventing destruction of gel cell?
by "Arjen Raateland, FEI/Impacts Research" <Arjen.Raateland@vyh.fi>
- 58) [1303] Re: outback make-do antennas
by Monte Stark <ku7y@sage.dri.edu>
- 59) [1304] Re: preventing destruction of gel cell?
by "S. Lee" <slee@u.washington.edu>
- 60) [1305] Books to Learn from
by KB9RPD <KB9RPD@aol.com>
- 61) [1306] S&S TAC-1 QRP rig.
by "C.D. Rakes" <cdrakes@ipa.net>
- 62) [1307] Re: Books to Learn from
by Stanley Wilson <microres@crl.com>
- 63) [1308] Re: preventing destruction of gel cell?
by Hank Kohl K8DD <k8dd@contesting.com>
- 64) [1309] 6 meter QRP fun
by Joel Malman <malman@BBN.COM>
- 65) [1310] Ten Tec AC 5 QRP Tuner
by Paul Helbert <phelbert@rica.net>
- 66) [1311] Re: Notched NorCal K8FF Paddle Handles
by kf2ew@juno.com (David M Kopacki, Sr.)
- 67) [1312] preventing destruction of gel cell?

by "Arjen Raateland, FEI/Impacts Research" <Arjen.Raateland@vyh.fi>
68) [1313] NA Sprint
by Monte Stark <ku7y@sage.dri.edu>
69) [1314] Re: outback make-do antennas
by k7sz@juno.com
70) [1315] AL7FS has fun today.
by "Jim (AL7FS), Nancy (KL7NY), Juliann (WL7MP) & Issei"
<larsennc@alaska.net>
71) [1316] One tube transceiver from the 60's ???
by N3BJ <N3BJ@aol.com>
72) [1317] Portable op
by Terres Family <terresfm@ncia.net>
73) [1318] Two Old Electr. Books - Handbook and Data Book -Not QRP but...
by "Gary M. - W2UX" <mail4gary@worldnet.att.net>
74) [1319] Antenna testing
by tom whalen <whalen@swcp.com>
75) [1320] Line=phone not 120 VAC
by Paul Helbert <phelbert@rica.net>
76) [1321] Re: NA Sprint
by Monte Stark <ku7y@sage.dri.edu>

Date: Sat, 17 Jan 1998 16:08:51 -0800
From: Monte Stark <ku7y@sage.dri.edu>
To: ki6ds@dpol.k12.ca.us
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1246] Re: Tuna Tin 2, CB Slider & Herring Aid 5
Message-ID: <34C14813.735F@sage.dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hendricks, Doug wrote:

>
> This is starting to be fun. Why don't we find someone to update the CB
> Slider and the Herring Aid 5 articles to modern components.

Lets include the TunaTin II updates and make a complete package!

> If someone
> will do it, I will draw the schematics in Circad as well as an updated
> version of the parts layout.

Sounds good to me!

> Monte and I can both print the articles in QQ and QRPP, and we can send the

> circuit board layouts to Fred at Far Circuits.

OK.

> Ok, guys, Monte and I are committed (Hey Monte, how do
> you like the way that I volunteered you??? Grin (Monte is a very close
> friend)).

Well, I was down getting a banjo lesson and didn't see everyone else
step back! But that's OK.....(paybacks can be ruff.....) :-)

Who is gonna be first to do a SMD version?

Next deadline for the Quarterly is Feb 13th for the April issue. How
fast can you all get the job done?

Lets push Doug and make him hurry. He works soooo much better under
pressure! :-)

Wheeeee, ain't it fun??

--

73, Ron, KU7Y

NRA Life-----Ex W6JX0, DL4RF, N7CRV-----SOWP #5545-M
QRP QRCI #8829----NorCal #330----QRP-L #17-----ARS #49
AR QRP #150-----DM09cg-----New Washoe City, NV

Date: Sat, 17 Jan 1998 07:32:35 -0500
From: "tom palmer" <n1tp@worldnet.att.net>
To: <qrp-l@Lehigh.EDU>
Subject: [1247] FOX SPOT
Message-ID: <19980118003156.AAA14209@default>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

W2MBY, JOHN, NOW ON 7.141.20. 72/73 N1TP, NAPLES, FL.

Date: Sat, 17 Jan 1998 18:40:11 -0600
From: Conard Murray <ws4s@InfoAve.Net>
To: qrp-l@Lehigh.EDU

Subject: [1248] fox spot w2mby
Message-ID: <01bd23a9\$a23a0b00\$f76e74cc@ws4s>
MIME-version: 1.0
Content-type: text/plain; charset="iso-8859-1"
Content-transfer-encoding: 7bit

w2mby is fb solid copy 549 into TN on 7141.2 at 0040 and growing stronger.
He's doing a fine job too!
Y'all work him...
73 de Conard, WS4S

Date: Sat, 17 Jan 1998 17:55:31 -0700
From: Steve Galchutt <n0tu@webaccess.net>
To: B/BAMS Club Station <nq2rp@juno.com>
Cc: "\"Low Power Amateur Radio Discussion\"" <qrp-1@Lehigh.EDU>
Subject: [1249] Re: Hamstick to Bugcatcher conversion...
Message-ID: <34C15303.119D@webaccess.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hey Keith Great idea TKS!...and I'll slip heat shrink over the braid when I'm finished, YES. Already got the coil mounted on the shaft with small Lexan disks epoxied at both ends of the coil, attaching to the plastic support rods...seems to be holding just fine...I discovered that I only need only half the coil for 40m? so I'm going to first try the braid idea then see how much more coil I need and maybe trim some it(I using the heical wound wire up to coil right now)..or measure the inductance and wind a new high Q one for 7040! Oh, yes the whip/stinger is above the coil of course. Tks! So far its working...I just worked Joe-AB7TT/P and Ed-WE6W!! Not great signal reports but it's doing alot better than the generic Hamstick was doing..I think more tests needed!

Steve

B/BAMS Club Station wrote:

>
> Hi Steve. Keith here in the Great Bergen Swamps in WNY...
>
> Cover the fibreglass shaft with braid up to the coil mount, and put the
> adjustable whip section above the coil. Seeing that the fibreglass mast
> is tapered, a couple of washers, large enough to mount the coil would

> handle the task. Lexan (tm) would be best as it doesn't become
 > embrittled with UV exposure, and is bulletproof.
 >
 > I have a 6-foot long Firestick (tm) CB antenna that I am going to convert
 > to a center-loaded 20 Meter antenna using the same methods.
 >
 > 72/73, Keith, WB2VU0 at the keys at B/BAMS
 > NQ2RP - QRP-L # 1294,
 > Byron/Bergen Amateur Microwaves System Club Station
 > Listen for our 10 Mtr Milliwatting Beacon: 125 mW @ 28.287 MHz
 > "Our night light runs more power than our Rig!!!"

--

CUL Steve/n0tu . .
 Solar powered QRP/CW
 "Camping" in Monument, CO....email:N0TU@webaccess.net

 Date: Sun, 18 Jan 1998 02:08:31 +0000
 From: Bob Roach <KE4QOK@worldnet.att.net>
 To: qrp-l@Lehigh.EDU
 Subject: [1250] Keyer wiring convention
 Message-ID: <19980118020829.AAA16050@LOCALNAME>
 Mime-Version: 1.0
 Content-Type: text/plain; charset="us-ascii"

Hello All,

I am just putting the finishing touches on my first kit (38 Special w/no
 mods yet). I have a tick keyer and am planning to install it and use a
 stereo headphone jack to attach the paddles. Is there a standard wiring
 convention for which wire goes where or is every rig different?

(o o)

-----o00_()_00o-----
 73 es TNX Advanced, W5YI/ARRL VE, QRP-L#1264, AR QRP#83
 KE4QOK KE4QOK@worldnet.att.net
 Bob ke4qok@juno.com

136 Hermitage Road
 Newport News, VA 23606
 (757)930-0348

When the student is ready.....
 The teacher will appear.

Date: Sat, 17 Jan 98 18:14:29 PST
From: Paul Erickson <paul1@wizard.ucs.sfu.ca>
To: KE4QOK@worldnet.att.net
Cc: qrp-1@Lehigh.EDU (qrp)
Subject: [1251] Re: Keyer wiring convention
Message-ID: <9801180214.AA27828@wizard.ucs.sfu.ca>

Hi Bob,

I believe the convention is that the dit paddle goes to the tip of the connector.

cheers, Paul
VE7CQK
email: paul1@wizard.ucs.sfu.ca

>
> Hello All,
>
> I am just putting the finishing touches on my first kit (38 Special w/no
> mods yet). I have a tick keyer and am planning to install it and use a
> stereo headphone jack to attach the paddles. Is there a standard wiring
> convention for which wire goes where or is every rig different?
>
> (o o)
> -----o00_()_00o-----
> 73 es TNX Advanced, W5YI/ARRL VE, QRP-L#1264, AR QRP#83
> KE4QOK KE4QOK@worldnet.att.net
> Bob ke4qok@juno.com
>
>
> 136 Hermitage Road When the student is ready.....
> Newport News, VA 23606 The teacher will appear.
> (757)930-0348
>
>
>

Date: Sat, 17 Jan 1998 21:27:37 -0500 (EST)
From: Bensondj@aol.com
To: qrp-1@Lehigh.EDU

Subject: [1252] Extruded enclosures
Message-ID: <980117212736_-864488487@mrin52>

>>Date: Fri, 16 Jan 1998 13:00:04 -0500
>>From: Peter_Simpson@3com.com
>>To: Bob_Tellefsen-CNSE97@email.mot.com
>>Cc: qrp-1@Lehigh.EDU
>>Subject: [1133] Extruded enclosures

>>Bob has discovered extruded enclosures. I have a bunch
>>(also from old modems), and they seem to be custom made, because
>>I have never been able to find out where to buy them in small
>>quantities. ...

>>Anyway, if anyone knows a company that makes these things, please
>>share the info.

Try Lansing Instrument Corp., they're at 800-847-3535. They'll sell small quantities and will furnish brochures upon request. You can see several examples of their product line on my website:

www.fix.net/~jparkers/ml.html

73, Dave- NN1G
Small Wonder Labs

Date: Sat, 17 Jan 1998 22:14:12
From: Steven Weber <kd1jv@moose.ncia.net>
To: dave_epps@juno.com
Cc: qrp-1@Lehigh.EDU
Subject: [1253] Re: ironon pcb
Message-ID: <3.0.3.16.19980117221412.23773f26@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>I am trying to find the distributor for the (paper, film or whatever)
>that you use to photocopy pcb artwork to and then iron it onto the pcb.
> tks dave ab5pc fresno,ca
Hi Dave,

PnP Blue is what I like to use. For just a few sheets, ALL Electronics has it, I believe 5 sheets for \$11.95. If you get hooked on the stuff like I did, buying direct is a better deal.

Techniks, PO Box 563, Ringoes, NJ 08551, tel, 908.788.8249
20 sheets, \$30.00, 40 sheets, \$50.00, 100 sheets, \$100.00 + \$4.00 S+H

Circad, Laser printer and PnP Blue is the homebrewers dream.

Usual disclamers, yadaa, yadda, yadda.

72,
Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Sat, 17 Jan 1998 22:51:06 -0500 (EST)
From: "L. Jeffrey Hetherington" <jhetheri@freenet.npiec.on.ca>
To: Multiple Recipients of List <qrp-l@Lehigh.EDU>
Subject: [1254] Centennial 20 SSB
Message-ID: <Pine.SGI.3.96.980117224855.8039A-1000000@freenet.npiec.on.ca>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi all. Is there anybody around that has built either the Centennial 80
or the Centennial 20 that wouldn't mind emailing me their findings
regarding building and operating the rig?

I am considering the Centennial 20 to be my /mm rig in my Canoe and
possibly to power a 6m transverter.

Any info would be greatly appreciated.

Thanx.

Jeff - VA3JFF
<http://www.geocities.com/Colosseum/2572/QRP.html>

=====
L. JEFFREY HETHERINGTON
Niagara Falls, Ontario, Canada
E-mail: L.Jeffrey.Hetherington@InternetAddress.com

Date: Sat, 17 Jan 1998 23:05:12 EST
From: N10DL <N10DL@aol.com>

To: qrp-1@Lehigh.EDU
Subject: [1255] No FOX in NH
Message-ID: <7a479530.34c17f7a@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

I really need to get a better antenna. I think it has a fobia about FOX hair. It seems that whenever the fox is out my antenna stops working. only heard a lot of QRN here in NH.

Aron

N10DL

QRP-L#1326

PS. I know the antenna works as I spoke to a QRP station tonite in Novia Scotia for about 20 minutes around 10:00 PM EST. gave me a 339 using my TAC-1at 5 watts into a G5RV, Jr. in attic

Date: Sat, 17 Jan 1998 22:27:08 -0600
From: "Robert J. Gobrick" <rgobrick@worldnet.att.net>
To: qrp-1@Lehigh.EDU
Cc: "David Newkirk" <dnewkirk@bellatlantic.net>
Subject: [1256] Re: What CW Tone Do You Prefer?
Message-ID: <3.0.32.19980117222457.00b1c894@postoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Gang,

I thought I'd repost an email that I received from Dave W9VES that aptly answers my question on why do rigs come with 750-800 Hz cw offsets. And his answer is one I completely forgot about even though I've built a number of QRP rigs recently that don't have those 50Hz narrow DSP IF filters in them. You remember what happens when you get your CW note so low and the bandwidth of your signal-to-signal IF filter is a little wide (yes those 2 pole xtal IF filters) - Well here's the reason why 750-800 or even 1000 Hz was chosen as per Dave's keen memory.

It also explains why the fancier store-built rigs nowadays don't specify an offset -they let the operator choose it (like Ron's KU7Y Yaesu FT-1000MP). I think it is a cop-out from the manufacturers's not determining what the best code tone should be for a given speed. I guess once again that will have to be left up to us QRP builders who HAVE to pick an offset. That reminds me that Preston Douglas WJ2V and I wrote an article a number of moons ago for the QRP Quarterly explaining why you had to not only pick a sidetone you liked but you also needed to adjust the BFO to the same frequency and make sure the RIT off-set was correct to really "fine-tune"

your rig for those fast break Fox hunt QSO's - how many times did I find my old HW-9 having a changing offset between transmit and receive.

Anyway an interesting topic that I still haven't heard an answer for - Besides personal preference (which is not scientific - well maybe that's a stretch - hi) is there an optimal code tone associated with a code speed (for an average human - excluding QRPers) - or are they even related? Has anyone come across that RadCom cw operator survey article that was mentioned?

Thanks Dave for more fodder - hi.

Cheers 73/72 Bob N0EB

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>From: "David Newkirk" <dnewkirk@bellatlantic.net>
>To: <rgobrick@worldnet.att.net>
>Subject: Re: What CW Tone Do You Prefer?
>X-MSMail-Priority: Normal
>Date: Sat, 17 Jan 98 12:20:47 +0000
>
>Hi, Bob!
>
>I "read the mail" on the QRP-L list via HTTP--don't like having my e-mailer
>fill up with all that traffic :-D--and thought I'd answer your question:
>
>>So I guess my real question is, and maybe this is what Daniel was after,
>>why is the 750-800 Hz tone used so often - is it just a de facto standard
>>that someone set years ago? Is there really an optimal range of tones at
>a
>>particular code speed?
>
>The reason store-bought rigs come off the shelf at 750-800 (1 kHz years ago
>for radios from Drake and Collins) is that a value this high provides
>acceptable rejection of the opposite sideband ("the other side of zero
>beat") with heavy AGC and SSB-width (2.1 to 2.7 kHz) IF filtering. It also
>allows use of the same BFO and LO frequencies for SSB (one sideband or the
>other) and CW without having to shift the BFO or LO when changing modes;
>this aspect was more important years ago before so many radios contained
>microprocessors and digitally-controlled synthesizers.
>
>Setting the BFO for a beat note that's too low with a single SSB-width IF
>filter in line usually makes the other side of zero beat audible when you
>tune toward the other side of zero beat and the radio's AGC turns the gain
>way up. Anyone with a TS-850, TS-450 or TS-690 can investigate this for
>themselves by setting the CW receiving pitch to its lowest value (400 Hz, I
>think) and cutting out all but the first-IF SSB-width filter.
>
>It's OK with me if you excerpt this to the list. :-D
>
```

>Regards,

>

>David Newkirk, W9VES

>dnewkirk@bellatlantic.net

>

Bob Gobrick - N0EB & V01DRB (ex WA6ERB, VE2DRB) Stillwater, MN

Internet: rgob@tengizchevroil.com and rgobrick@worldnet.att.net

Date: Sat, 17 Jan 1998 22:27:05 -0600

From: "Robert J. Gobrick" <rgobrick@worldnet.att.net>

To: KB9RPD <KB9RPD@aol.com>

Cc: qrp-l@Lehigh.EDU, gqrp-l@blacksheep.org

Subject: [1257] Re: Doug DeMaw

Message-ID: <3.0.32.19980117215602.00b1c894@postoffice.worldnet.att.net>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Ted,

Well I have to admit your email struck a nerve especially when I read your last paragraph about you being a Civil War Reenactor. It so happens that Doug Demaw W1FB was a "Living Mountain Man" and if you are able to get a hold of the latest issue (Jan 98) of the QRP ARCI QRP Quarterly magazine you can see a picture of Doug dressed in his muzzle-loading Mountain Man outfit - this was done in a tribute article by Mike Czuahajewski, WA8MCQ president of QRP aRCI.

Also if you get the opportunity there was another wonderful personal tribute made to Doug Demaw by the Reverend George Dobbs G3RJV from the G-QRP Club. In the Dec 97 issue of Practical Wireless (UK ham mag) George has a wonderful story and also a picture of George dressed up in Doug's Mountain Man outfit - complete with muzzle-loading rifle. I'm sure George will cherish that photo.

But I will have to say you made the biggest tribute to Doug Demaw by "discovering" his wonderful work on the QST CD ROMS. Us "old-timers" tend to forget about the joy of discovering a fine author and devouring every word he writes. I place guys like William Orr in that same category - I memorized every one of his antenna books when I first started in ham radio. Anyway, "lead" the charge on building a Tuna Tin II - there is actually a lot of talk of some big "DeMaw tribute" projects coming up to do a Tuna Tin II Tribute (remember I coined that...)

Cheers and thanks Ted for your post - 73/72 Bob N0EB

From: KB9RPD <KB9RPD@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [1222] Doug DeMaw
Message-ID: <fe249869.34c1003d@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

A few people couldn't believe I wanted to build the tuna tin! I say, "why not?"!!!! Every time someone told me I couldn't do something or that it was hard to do something a particular way...that was a challenge. Part of my nostalgic streak is due to my love for history. I am a Civil War reenactor and love living history and education. For me, part of the understanding, thrill, enjoyment, and satisfaction is to build basic, low cost, low power, experimental equipment to operate! Oh, I will probably buy the bigger stuff...when I can afford it and have somewhere to put an antenna. ;-)

73, Ted - KB9RPD

Bob Gobrick - N0EB & VO1DRB (ex WA6ERB, VE2DRB) Stillwater, MN
Internet: rgob@tengizchevroil.com and rgobrick@worldnet.att.net

Date: Sat, 17 Jan 1998 23:36:20 EST
From: wa8rxi@juno.com (Richard C Arzadon)
To: G.Heron@dialogic.com
Cc: qrp-1@Lehigh.EDU
Subject: [1258] Re: TunaTin2 Circad File
Message-ID: <19980118.044013.4775.0.WA8RXI@juno.com>

Doug,
If you want to do it a more combersum way, QST had an article (October 1993), also on the cover. I down loaded the "Symbol Tables" from ARRL BBS. First thing I drew was the G-QRP Pixie with Offset (Sprat #89 Winter 1996/1997) by W1FB and added the Sidetone from QQ (April 1997 page 24) by KD6MNP ("might work"). Printout comes out pretty good on my 'ole MX-80 HI.

Just started working with CIRCAD, nice program, 'course can't do much with it 'cuz its the trial version. But, have downloaded some circuits from other sources

that are CIRCAD compatible and again the schematics print pretty nice on my trusty MX-80.

72, Rick

Date: Sun, 18 Jan 1998 00:02:14 EST
From: JerryK0DU <JerryK0DU@aol.com>
To: qrp-l@Lehigh.EDU
Cc: JerryK0DU@aol.com
Subject: [1259] DISCONTINUE qrp-l@Lehigh.EDU
Message-ID: <f426e6ae.34c18cd8@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Please discontieue QRP E-MAIL from qrp-l@Lehigh.EDU untill further notice.
Thankyou. JERRY K0DU

Date: Sat, 17 Jan 1998 22:11:32 -0700 (MST)
From: Paul Harden <pharden@aoc.nrao.edu>
To: JerryK0DU <JerryK0DU@aol.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1260] Re: DISCONTINUE qrp-l@Lehigh.EDU
Message-ID: <Pine.SOL.3.91.980117220926.3599A-100000@zia>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sun, 18 Jan 1998, JerryK0DU wrote:

> Please discontieue QRP E-MAIL from qrp-l@Lehigh.EDU untill further notice.
> Thankyou. JERRY K0DU

You need to send your request to ... listserv@lehigh.edu
then in the email body ... UNSUBSCRIBE QRP-L

Paul NA5N

Date: Sun, 18 Jan 1998 00:44:15 EST

From: Ka0yos <Ka0yos@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [1261] International Call Lookup
Message-ID: <50be26de.34c196b1@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Short of Buckmaster and QRZ (It wasn't on either) does anyone know where to look up EC7AKQ?

Thanks and 72,
Joe

Date: Sat, 18 Jan 1997 05:44:36 -0400 (AST)
From: wp4jxd@prtc.net (wp4jxd)
To: JerryK0DU <JerryK0DU@aol.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [1262] Re: DISCONTINUE qrp-1@Lehigh.EDU
Message-ID: <Pine.LNX.3.95.970118054254.427C-100000@pentagon>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Please read the file that was sent to you when you subscribed. There ain't a person handling subscription

Regards,

Pablo Luis

On Sun, 18 Jan 1998, JerryK0DU wrote:

> Please discontieue QRP E-MAIL from qrp-1@Lehigh.EDU untill further notice.
> Thankyou. JERRY K0DU
>
>

Date: Sat, 18 Jan 1997 05:53:36 -0400 (AST)
From: wp4jxd@prtc.net (wp4jxd)
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Subject: [1263] Re: DISCONTINUE qrp-1@Lehigh.EDU
Message-ID: <Pine.LNX.3.95.970118055149.259B-1000000@pentagon>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Ooops I didn't intended to send the mail to the whole list. Sorry there.
BTW I forwarded K0DU the mail that was sent to me when I subscribed so he
should be ok by now

Regards,

Pablo Luis

Pablo Luis Robles "QRP signals aren't hard to copy you
e-mail: wp4jxd@prtc.net should just increase the volume"

HOME PAGE: <http://www.geocities.com/capecanaveral/hangar/3613>

Date: Sun, 18 Jan 1998 01:04:29 EST
From: KF4EIB <KF4EIB@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [1264] Lost Files
Message-ID: <b8875459.34c19b6f@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Gang,

Many thanks to all that have helped rebuild my "file" of web sites.
Some of which I had not found / used before.

A few people made mention of using search engines, etc.True.
As the old saying goes... some days you can't see the trees for the forrest.
A PC can scramble a mind at the touch of a button !
Again, thanks to all that helped.

May the frequency be with you!

72,
Gordon kf4eib

Date: Fri, 19 Dec 1997 07:00:15 -0800
From: Bill Jones <kd7s@psnw.com>
To: qrp-1@Lehigh.EDU
Subject: [1265] Re: Dan's Small Parts Question
Message-ID: <349A8BFF.82AAD164@psnw.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dan has ALWAYS provided excellent and timely service with my orders. My guess is that your order is probably sitting in the post office under a stack of Christmas cards.

ckrelic@usaor.net wrote:

> Hello all,
>
> Never dealt with Dan's before and must ask, is it always
> this hard to get in touch with them? Ordered weeks ago
> and nothing heard. Time of year maybe?
>
> Thanks,
>
> Curt/Ka3ivb

Date: Tue, 23 Dec 1997 07:12:09 -0800
From: Bill Jones <kd7s@psnw.com>
To: qrp-1@Lehigh.EDU
Subject: [1266] ARRL RTTY Roundup QRP Style
Message-ID: <349FD4C8.82725B68@psnw.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Friends,

Anyone else plan to work the upcoming ARRL RTTY Roundup contest in January at QRP power levels? I would love to have some RTTY or AMTOR QRP to QRP contacts. Just don't look for me on 14.060 or any other QRP calling frequency.

Contest dates and times: Saturday, January 3rd 1800 UTC to Sunday, January 4th at 2400 UTC. Exchange (United States) Signal Report and State. For Canada, Signal Report and Province. Entry Categories: Single Operator: Low Power (150 watts is low power?) and Single Operator: High Power. Gee.....does that mean we married guys can't compete? Oh well.

And BTW, I intend to tack on a "output power here is 4 watts" to the end of my contest exchanges.

Date: Sun, 18 Jan 1998 00:17:39 -0600
From: "Harley L. Miller" <hmliller@sound.net>
To: qrp-l@Lehigh.EDU
Subject: [1267] Nostalgia QRP
Message-ID: <34C19E83.7EFC@sound.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

While we're resurrecting old QRP projects don't forget the FunMitter/Ceiver/VFO series in 73 mag. Neat little rigs.

Harley L. Miller hmliller@sound.net
WB0ROQ QRP-L #373

Date: Sun, 18 Jan 1998 01:26:22 -0500
From: N4JS <n4js@pobox.com>
To: qrp-l@Lehigh.EDU
Subject: [1268] FYB0
Message-ID: <v03110701b0e7507da8d5@[206.106.174.44]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

See I am off on Feb 7 for FYB0, so the work excuse to stay inside is out. I ordered one of the big 4 magnet mounts, and will try a Hustler Vertical on the roof of the Explorer (parked, not in motion). May try my Gusher dipole, too, if I go over to Parvin State Park.

Here's hoping for REALLY cold weather.....NOT!

_/ _/ _/ _/ _/ _/_/_/ John L. Sielke
 n4js@pobox.com
 // _/ _/ _/ _/ _/ n4js@qsl.net NJ
 Grid:FM29LN
 _/ _/ _/ _/_/_/ _/ _/_/ http://www.qsl.net/n4js
 NJ-QRP #57
 _/ _/_/ _/ _/ _/ _/ QRP-L #884 QRP-ARCI
 ICQ# 3789653
 _/ _/ _/ _/_/ _/_/_/ QCWA CQrp CQC ARS
 #243 FISTS #2781
 G-QRP #9544 Norcal #1989 ARQrp, AKQrp Formerly: K3HLU, W7JEF, W4MPC,
 TF2WKT

 Date: Sat, 17 Jan 1998 22:19:27 -0800
 From: "Frank A. West" <ke6vhm@earthlink.net>
 To: <wp4jxd@prtc.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
 Subject: [1269] Re: It's Official
 Message-ID: <199801180711.XAA16816@denmark.it.earthlink.net>
 MIME-Version: 1.0
 Content-Type: text/plain; charset=ISO-8859-1
 Content-Transfer-Encoding: 7bit

My wife's cockatiel is named CQ
 and loves the sound of CW
 72 Frank

 > From: wp4jxd <wp4jxd@prtc.net>
 > To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
 > Subject: Re: It's Official
 > Date: Tuesday, January 13, 1998 1:41 AM
 >
 > Hey, if a dog can copy morse, maybe I can get my cockatiel to call CQ
 QRP!
 >
 > Regards,
 >
 > Pablo Luis
 >
 >

>

-

> Pablo Luis Robles "QRP signals aren't hard to copy you
> e-mail: wp4jxd@prtc.net should just increase the volume"

>

> HOME PAGE: <http://www.geocities.com/capecanaveral/hangar/3613>

>

-

>

>

>

Date: Sat, 17 Jan 98 21:47:30 HST
From: mike@krypton.nmr.Hawaii.Edu (Mike W. Burger)
To: qrp-l@Lehigh.EDU
Subject: [1270] qrp rtty
Message-ID: <9801180747.AA10876@krypton.nmr.Hawaii.Edu>

Working on projects at contest station KH7R, I managed to get a SoundBlaster Card going on a computer and patched into an ICOM 781. After considerable teeth gnashing and hair pulling, it worked more or less right, except for having to switch to transmit manually.

The second contact we made with the station on 14.086 or so was a station in Japan that was running one (1) watt. A few characters were garbled but it was coming in quite well.

RTTY has come a long way since I bashed about with Model 15's and one tube "converters" in the early 1960's. It appears that with all the fancy DSP units and coverters, computer display tuning aids and so forth, it is not the holy war it used to be. You don't even need a box of high pressure mercury wetted relays any more or a 120 volt DC loop power supply!

I just got a new DSP unit that has a RTTY reconstruction feature. I will have to try to hook it up to my ancient Kantronics Universal interface and see if I can get RTTY going at my home QTH.

<http://www.chem.hawaii.edu/uham>

AH7R - Mike Burger, University of Hawaii at Manoa, Dept. of Chemistry
HI-QRP #28 - QRP-L #1053 - FISTS #3225 - BL11ch - Honolulu County

Date: Mon, 19 Jan 1998 12:48:53 -0800
From: Jon Iza <iapizloj@bicc00.bi.ehu.es>
To: qrp-1@Lehigh.EDU
Subject: [1271] What CW tone do you prefer? (kinda long)
Message-ID: <34C3BC35.5EC1@bi.ehu.es>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Folks,
I've read with interest the thread on CW tone and am following threads like that for several years, so here I go with my two pesetas.

Most of the rigs have pitches around 750-800 Hz AND the filter/BFO/LO system is adjusted in such way that when transmitting, the carrier is shifted "exactly" the same amount and in the right direction. If you try to listen at a lower pitch, your carrier will get shifted and may get out of the receiver passband of the correspondent.

The problem is that, after the rig, there is a couple of ears and a brain doing a nice hybrid mechanical and electrical (analogic and digital) signal processing to change those funny noises into a (hopefully) meaningful wise sentence.

It seems that 800 Hz, or even higher values, like the one used on the Heathkit "Green Boxes", 1000 Hz (posted on the list by George, W5YR) was picked up because that's close to the highest "sensitivity" of the human ear, following the well known Fletcher-Munson curves. But that doesn't mean the highest "selectivity".

In 1989, G3XJS, GW0DYT and G8PG did some research on the subject and published "A report on Project Frequency Band", evaluating the use of LC passive filters on DC receivers, instigated by no other than Ed Wetherhold, W3NQN, ARRL's technical advisor on passive filters. They used filters with center frequencies of 750 Hz and as low as 450 Hz, finding that the later was more useful than the other, but having both added flexibility, as Pat Hawker (G3VA) reported later on Rad Comm's Technical Topics, (December 89, pp. 38).

If you have been lucky enough to built any filter using the nice kits Ed

makes, you probably remember on his leaflet they were details for filters centered at different frequencies, many of them at low pitches (one of the consequences of the abovementioned report).

Later on (Rad Com April 90, pp.32), G3VA reported on another experiment by Tony Tuite, an ex-RAF operator, carried out with ten well seasoned operators (over 50 years old).

They were set up to listen to CW at 18-20 WPM and to note the preferred pitch. Six of them said 750 Hz, but the real pitch was close to 500 Hz. Three said 600-700 Hz, and they were 475 Hz. And one had perfect pitch and was 50 Hz close to the frequency he noted of 500 Hz. When the transmission speeded-up to 25 WPM, they tended to increase the pitch to 600 Hz (100 higher than at "normal" speed)

Other source of information for me was Magin, EA3LL, one of our best EME operators, who tried my W9GR DSP on his station. He was disappointed with the unit not for having a 30 Hz filter centered at 750 Hz, but for not having a CW filter centered at 400-500 Hz. He told me EME operators use very low pitches, around 400 Hz, because it is way less tiring to listen for hours that with higher tones.

That reminds me of another note made by G3VA (Rad Comm, June 89, pp. 36)

on a paper by E. Zwicker and R. Feldtkeller "Das Ohr als Nachrichten empfaenger" (The ear as a receiver of information) dated 1967, where they stated the ear has 24 sub-bands between 300 Hz and 20 kHz, being the sub-bands narrower (100 Hz) at the low end of the band, and wider (2 kHz) at the top. It looks like a CW desired signal can be masked if there is an interfering signal "within the same sub-band" even though the ears can differentiate and filter tones 50 Hz apart, even less. The final recommendation of the authors was to use low pitch signals (300-500 Hz).

Ken, K6HCP published on Ham Radio, Nov. 1975, pp. 28-34 the weak-signal operators preferred low pitches and, most interesting, the use of low pass filters!! He wrote that the brain copies signals comparing signal against signal or signal against noise. Narrow filters exclude some signals AND noise which can make more difficult the detection. That is exactly what Ade, W0RSP, posted, on listening to the "different noises" to ascertain the signal).

(For those of you having English as mother tongue, excuse me for the use of "ascertain"; I don't know if it fits here, or it means what I want to mean here, but I was dying to use it somewhere...

: -)

W2IMU carried out experiences using a 3 kHz wide receiver and a CW signal

of varying level. The signal was "detected" with a -20 dB S/N ratio (signal 20 dB below the noise), callsigns were copied at -9/-12 dB S/N and at 0 dB S/N (signal equal to noise) the copy was 100%. It looks like the copy of the callsigns was possible because the brain was using a receiving bandwidth of 50 Hz or so, increasing the S/N ratio (less bandwidth, less noise).

>From a graph on the article, it looks like the critical bandwidth goes through a minimum of around 20 Hz at a frequency close to 400 Hz (which now may be wrong, after the new research done on the field).

Based on a German magazine article from 1979, DJ4SB and DJ1ZB published on Sprat No 58 (1989) the maximum selectivity of the human ear peaks at 300-400 Hz...

If it were not enough with all these ramblings, another thread started recently on the Ten-Tec list. Most of you know very well that Ten-Tec rigs have a fame of being excellent for CW work, and are used by top CW operators (including one who send a bitter letter complaining the CW keyer installed on the Omni was only going to 69 WPM... :-)

Well, it looks like many of them really like lower pitch for CW receiving, and they have lobbied Ten-Tec filter maker to prepare a special order of CW filters specified for lower pitch. (Remember what I've said at the beginning of the post?) That way, they will be using a low pitch on receiving, and the CW carrier when transmitting will be just on the right spot for the other station to go easily through its filter bandpass.

Luckily for us, they asked more or less the same question as here: What CW tone do you prefer?, and the replies were interesting. Most of the operators settled down for a frequency very close to 550 Hz +/- 50 Hz, with some outliers. (After reading my notes, I wonder how many of those measurements were well done.... maybe they are all close to 400 Hz. ;-)

It looks like 25+ ops are going to spend 125-150 bucks on a special-order filter to enjoy more their rigs...

So it looks like the CW "and" weak-signal operators prefer low pitch tones for reception of signals.... It may be food for thought for the designers, to "tweak" their designs and allow for lower tones.

Enough for now.
Be well.

jon, ea2sn
A phone operator!

P.S. 1

Scott, NF3I, posted a long detailed study on how many "waves" per dit will be sent at 40 WPM for different pitches. I did get into a very interesting discussion with Gary Bold, ZL1AN, who writes on the NZART Break-In bulletin about CW, on the very subject. My hypothesis was that at high speed CW, the ear must have inertia problems, "starting" and "stopping" the eardrum with each dit or dah. Elaborating on that, I would say the eardrum has to pick up several "waves" to identify the signal amongst other signals and noise... But when you know they are folks around able to do 100+ WPM, the hypothesis goes down the sink... Reading later that on Nature, 5 Oct. 89, pp. 397-404, A.J. Hudspeth reported the "hair cells" from the ear can detect motions of atomic dimensions and respond more than 100,000 times a second... one wonders: How the heck can we do it?

P.S. 2

If there is an editor of a QRP bulletin who wants to use these ramblings, please feel free to do so. But let me know; if I travel there I will have to disguise myself to avoid be put in a nuthouse. :-)

--

Jon Iza / Chem.& Environ. Engng. / University of the Basque Country
Escuela de Ingenieros / Alda. Urquijo s/n / E-48013 Bilbao -Spain-
Ph +34-4-427-8055 x2353 Fax +34-4-441-4041 Ham:ea2sn (a real qrp'er!)
** One's needs are proportional to the square of his/her incompetence **

Date: Sun, 18 Jan 1998 20:26:31 +0800
From: "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
To: iapizloj@bicc00.bi.ehu.es
Cc: qrp@pandora.lugs.org.sg
Subject: [1272] Re: What CW tone do you prefer? (kinda long)
Message-ID: <34c1f4f8.pandora@pandora.lugs.org.sg>

On Mon, 19 Jan 1998 12:48:53 -0800, "Jon Iza" <iapizloj@bicc00.bi.ehu.es> wrote:
> I've read with interest the thread on CW tone and am following threads
> like that for several years, so here I go with my two pesetas.

Excellent article. Fantastic summary Jon.

> Luckily for us, they asked more or less the same question as here: What
> CW tone do you prefer?, and the replies were interesting. Most of the
> operators settled down for a frequency very close to 550 Hz +/- 50 Hz,

So it does appear as if this whole preference business is not as arbitrary as one might have initially imagined. There are some patterns to those preferences.

> Break-In bulletin about CW, on the very subject. My hypothesis was that
> at high speed CW, the ear must have inertia problems, "starting" and

This may not be a "physical" inertia. One would have to consider the ability of the neurons to respond to stimulus of that frequency and if the recovery time of the chemical processes in the synapses. It's like a low pass filter but I don't know what the cut off frequency is like.

73 de 9V1ZV Daniel

--

```
+-----+-----+
| Daniel Wee | daniel@pandora.lugs.org.sg |
| 9V1ZV      |                               |
| QRP-L #667 | 9V1ZV@amsat.org                       |
+-----+-----+
```

Date: Sun, 18 Jan 1998 08:04:20 -0500 (EST)
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
To: "Hendricks, Doug" <ki6ds@dpol.k12.ca.us>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1273] Re: Getting CAD files into JPEG/GIF/TIFF/etc.
Message-ID: <Pine.SOL.3.94.980118074057.3991C-100000@moe>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

There is an alternative route to getting quite decent graphical files from CAD programs.

First, the screen display for the CAD drawing must be clean and crisp. After a little experience with the following technique, you will learn what line widths, etc. work best. Also be sure that the screen background is white (although white on black can be negated in this process)

In Windows 95, take a Print Screen of the screen of the CAD program with the drawing. Again, after a few learning drawings, you will know what size you want the screen drawing to be within CAD for the rest of the process.

Open a paint program such as Paint Shop Pro (which is shareware), and go to Edit, and open the clipboard graphic as a new drawing. In this

version, all the CAD border "stuff" will show, so you will have to select the region of the CAD drawing you want and copy it, entering it as a new drawing.

You can "doctor" the drawing with additional text, erasures, etc. Then simply save it to the file format you want. And you can combine two drawings into one of double size. This is usefull for me in combining azimuth and elevation plots, etc.

The same technique works in transferring plot patterns from antenna modeling programs like EZNEC to a form suitable for either print or web site media. Although web browsers call for .GIF or .JPG, I tend to save a second copy in .TIF (non-loss compression) or in the word-processor format into which I may integrate the pattern or drawing.

I also use this technique, especially for my web site, with graphs taken from a spread sheet. I usually step the graph window down within the spreadsheet so that the results fits upon conversion into a 640-pixel width.

Although I happen to like Paint Shop Pro, which is a fine program for the \$80 cost (I think that is about the price), other paint/draw programs offer similar capabilities. Virtually every graphic at my own and the other websites I maintain, as well as illustrations in published articles, has been through this process. I have also used it to clean up pixel-by-pixel some scanned graphics.

This does not invalidate Doug's investment in a CAD program with direct conversion capability. For large schematics with lots of fine-line detail, the program he sites undoubtedly will do a better job. However, for a large class of cases of smaller schematics and drawings that you want to convert into a transportable graphical format, this technique works very well indeed.

-73-

LB, W4RNL

L. B. Cebik, W4RNL	/\ /\ *	/ / /	(Off)(423) 974-7215
1434 High Mesa Drive	/ \/ \/\	----/\---	(Hm) (423) 938-6335
Knoxville, Tennessee	/\ \ \ \	/ / /	(FAX)(423) 974-3509
37938-4443 USA	/ \ \ \ \		cebik@utk.edu
URL: http://funnelweb.utcc.utk.edu/~cebik/radio.html			

Date: Sun, 18 Jan 1998 07:50:48 -0600
From: "Claton Cadmus" <aplitech@spacestar.net>
To: "QRP-1" <qrp-1@Lehigh.EDU>
Subject: [1274] Re: qrp rtty
Message-ID: <019c01bd2419\$f3c813c0\$9ac9bfce@groucho>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Mike W. Burger wrote

>Working on projects at contest station KH7R, I managed to get a SoundBlaster
>Card going on a computer and patched into an ICOM 781.

RTTY is becoming an increasing QRP activity. Mike used the sound blaster.
Most of us already have the equipment in the shack, we just need to hook it up
so it's available. But if you want to try RTTY and AMTOR and don't want to
use the main computer or don't have a sound blaster, you can still do it for
almost free. Terminal Units (TU) can be had at Hamfests for a few dollars.
Last Hamfest I must of seen three or four. These units can also be built
easily from the junk box. There were many articles on them in QST, 73 and CQ.
They're really just two op-amp audio filters and a couple diodes, few
resistors and caps. In goes the audio, out comes a nice data square wave.
Maybe a weekend project at best. Once you have the TU any computer can decode
it. Software is available for free. One of the most common and easiest
computers to use for this was the Commodore 64. There's another Hamfest item
for just a few dollars, and it works with a regular color or BW TV set!

So if your looking for a new QRP challenge, here it is and it's very
inexpensive! BTW it's fun too!

73 de KA0GKC Claton Cadmus
 cla@spacestar.net
MNQRP #1
Minnesota QRP'ers we're looking for you!
Email me or visit this page <http://www.qsl.net/mnqrp>

Date: Sun, 18 Jan 1998 09:24:11 EST
From: MSU1972 <MSU1972@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [1275] Keyer

Message-ID: <410ee78.34c2108d@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Just finished the K1EL keyer and mounted it with two AAA batteries in an Altoid tin. (Could use much smaller batteries and mount in a very small enclosure if preferred.) What a great keyer! Iambic, memory (even your callsign embedded as default), and I'll take it with me as it also operates as a CW practice code generator - and all for \$10 (includes circuit board) plus \$4 parts from RS. I've combined it with a Whiterook Iambic key (under \$10, another great item!) Didn't know QRP could be this cheap!
(No connections with company.)
David

Date: Sun, 18 Jan 1998 09:33:41 -5
From: "KB8TJX" <kb8tjx@raex.com>
To: qrp-1@Lehigh.EDU
Subject: [1276] who
Message-ID: <199801181432.JAA06547@mqueue.raex.com>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

who

Date: Sun, 18 Jan 1998 06:43:16 -0800
From: Jay & Jackie <jayboy@psnw.com>
To: qrp-1@Lehigh.EDU
Subject: [1277] Another JPG Question
Message-ID: <3.0.1.32.19980118064316.006a715c@mail.psnw.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi all:

I have been wanting to get a scanner make my own QSL's so I yesterday I asked a friend to send me scanned picture so I could see how it looks. He attached it to his E-mail as a little icon down in the corner of the e-mail....Says it's a .jpg file.

Question: How do I look at it?

I have Netscape, Eudora, MS Word, Works, and MS Publisher. When I click on the attachment all that happens is that the screen asks me if I want to make Internet Explorer my default browser (NO!), then it proceeds to open Internet Explorer...I'm stuck.....I've tried talking to the screen at various levels...Help please.

Jay, W6JDB Madera, ca

Date: Sun, 18 Jan 1998 10:05:09 -0500
From: Paul Stroud <aa4xx@ipass.net>
To: QRP-L <QRP-L@Lehigh.EDU>
Subject: [1278] Sierra Shaped Keying Question
Message-ID: <34C21A25.E0813F4E@ipass.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Gang,

I'd appreciate hearing from any of you who have done any shaped keying mods to the Sierra. My Sierra has an attack time of 1-2ms and a similar decay time, making the keying a little on the "hard" side, although not objectionable.

Thanks es 72,
Paul AA4XX

Date: Sun, 18 Jan 1998 10:05:17 -0800
From: Marty Ray <mray@netusa1.net>
To: qrp-l@Lehigh.EDU
Subject: [1279] Re: qrp rtty
Message-ID: <34C2445C.86E412F@netusa1.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Claton Cadmus wrote:

> ...if you want to try RTTY and AMTOR and don't want to
> use the main computer or don't have a sound blaster, ...

How can I use my sound blaster for rtty? Does anyone have net links where I can

download some software?

Thanks!

MartyRay
NN9H
mray@netusa1.net

Date: Sun, 18 Jan 1998 10:10:53 -0500
From: W2MY & W2MBY <n2mnn@spacegate.com>
To: QRP-L@Lehigh.EDU
Subject: [1280] FOX: Fox Hunt Results W2MBY
Message-ID: <34C21B7D.2F62@spacegate.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi all,

Lots of static and QRM last night. I managed to get a total of 13 QSOs: 10 QSOs during the first hour, but only three the second hour. I think more hams are on the air with scheds on Sat night, which causes more QRM compared to when I am Fox on Fri nights. Towards the end, I could not use the RIT because of stations 200 Hz below me, and 300 Hz above me.

I got some new hunters, and a new first, if I copied everything correctly: a record "RST 119 two way QSO" with Gary, AB7MY. My definition of R1 is that the signal is unreadable except with DSP. Gary's signal was so bad I had to give him something worse than the traditional bottom-of-the-barrel RST 219. To my amazement, I eventually copied "119" from him. Can't get any lower than that.

FREQ	UTC	CALL	SNT	RVD	ST	NAME
7141.0	00:01	NI0A	329	569	MN	JOHN
7141.0	00:06	N9KW	569	599	IL	JOHN
7141.0	00:09	WA9PWP	549	469	WI	PAUL
7141.2	00:16	VE5RC	229	229	SK	BRUCE
7141.2	00:27	N1TP	339	539	FL	TOM
7141.2	00:33	WS4S	229	539	TN	CONARD
7141.2	00:37	N0TU	329	339	CO	STEVE
7141.2	00:44	KA5T	339	539	TX	LARRY
7141.2	00:51	K6VNX	229	559	CA	ARLEN
7141.2	00:57	KB0PTE	439	539	MO	WAYNE
7141.2	01:28	WE6W	119	239	CA	ED

7141.2 01:36 W7JDZ 219 339 ?? MAC (CBA is ID)
7141.4 01:45 AB7MY 119 119 AZ GARY

72, John-W2MBY
(age 11)

Date: Sun, 18 Jan 1998 07:20:17 -0800 (PST)
From: kd7s@psnw.com (Bill Jones)
To: qrp-1@Lehigh.EDU
Subject: [1281] Twilight Zone e-mail
Message-ID: <199801181520.HAA22151@sierra.psnw.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Friends,

I'm not sure what's going on here but I'm spooked. I see several messages just now showing up that I sent days -- even weeks ago. My reference to the RTTY Roundup is just one of them. So, for those of you who asked, I really DO have a calendar and it does NOT have Rod Serling's picture on the front. Gee, have I discovered the internet equivalent to Long Delay Echos?

=====
Bill Jones - KD7S <><
Sanger, California
Reply to kd7s@psnw.com
=====

Date: Sun, 18 Jan 1998 08:08:05 -0800
From: Jay & Jackie <jayboy@psnw.com>
To: qrp-1@Lehigh.EDU
Subject: [1282] JPG Problem Solved
Message-ID: <3.0.1.32.19980118080805.006b8794@mail.psnw.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Geez:

You guys don't even let me finish my cup of coffee.....Thanks for the responses to get me pointed in the right direction.....I can view, I can view! Now how do I get that Microwave to heat this cold cup of coffee???

Jay, W6JDB

Date: Sun, 18 Jan 1998 10:12:25 -0600
From: David Gauding <david.gauding@bbs.galilei.com>
To: qrp-l@Lehigh.EDU
Subject: [1283] Foxx 2 Xcvr
Message-ID: <1.5.4.32.19980118161225.00933a48@bbs.galilei.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

GM Gang,

Wondering if anyone has built the Foxx 2 xcvr as updated by G3RJV in Sprat 91?

All comments, suggestions sincerely appreciated and thanks in advance!

de Dave, NF0R nf0r@slacc.com

Date: Sun, 18 Jan 1998 11:28:40 -0500
From: "Ron Polityka" <wb3aal@talon.net>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [1284] Not QRP but good advice.
Message-ID: <01bd242e\$2317cda0\$515445c6@default>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi All,

Sorry, but this message is not QRP related. If you have pressure treated wood and it looks old & worn, you want to make it look like new, do the following.

Mix 4 parts bleach and one part water. Take a stiff bristle brush and dip it into the mixture and scrub the wood. Let it sit for about 5 minutes and wash

down with water. When it dries you can re-seal it.
It will look like new. A friend told me about this and it works great!

73, Good DXing & QRPing
Ron de WB3AAL

E-mail: wb3aal@talon.net
BBS: WB3AAL @ WB3FYL.#BER.PA.USA.NA

EPA QRP # 1 QRP # 5318 10-10 # 13173
QRP-L # 1099 G-QRP # 3031 AK QRP # 309

Date: Sun, 18 Jan 1998 10:33:21 -0600 (CST)
From: maprath@prairienet.org (Mark A. Prather)
To: qrp-l@Lehigh.EDU
Subject: [1285] Reception Report for WA2HOQ
Message-ID: <199801181633.KAA05041@firefly.prairienet.org>

Hello to all!

Is WA2HOQ on this list?

I just copied his signal on 40M - just about 7040 or so.

Here is a reception report....

Call: WB9HFK
QTH: Urbana, IL
Name: Mark

Rig: OHR-100A
Ant: Windom @ 20Ft.

Ur RST: 559

Date: 01/18/98
Time: 1521 UTC

73, Mark

--

* Mark A. Prather - WB9HFK * maprath@prairienet.org *
* QRP ARCI #9472 - QRP-L #1159 * mprather@halcomm.com *

Date: Sun, 18 Jan 1998 11:48:01 -0500
From: Derek Brown <DBrown@RFMD.com>
To: "'QRP-L'" <qrp-l@Lehigh.EDU>
Subject: [1286] Sierra Output Transformer
Message-ID:
<c=US%a=_%p=RF_Micro_Devices%l=PACHACUTEC-980118164801Z-19161@proxy1.rfmd.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

In a response to one of my previous inquiries, someone mentioned converting an output choke (on his Sierra) to a transformer to increase the transmitter output. Can anyone provide details or point me to an appropriate URL for this mod.

Derek Brown
Greensboro, NC
dbrown@rfmd.com

Date: Sun, 18 Jan 98 09:56:49 MST
From: af852@rgfn.epcc.Edu (William R Colbert)
To: qrp-l@Lehigh.EDU
Subject: [1287] [v31xe@dzdn.com: MARS & CAP]
Message-ID: <9801181656.AA28967@rgfn.epcc.Edu>

===== Begin forwarded message =====

From: v31xe@dzdn.com ("William R. Colbert")
To: daniel@pandora.lugs.org.sg
Subject: MARS & CAP
Date: Sun, 18 Jan

Hi Daniel, I saw your post asking what MARS and CAP freqs were but never saw anyone indicate an answer - maybe they posted directly. If so, excuse the extra posting. When manufacturers or others particularly in this country refer to MARS or CAP they are referring to frequencies outside the amateur bands that are assigned to the U.S. military. MARS is the acronym for Military Affiliate Radio System, composed of volunteer

operators operating in concert with the various U.S. military branches , i.e. U.S. Army - callsigns start with AAA,AAR,AAT(number and 2 or 3 letter suffix), U.S. Air Force - callsigns start with AFA(number and 2 letter suffix), U.S. Navy/Marines/Coast Guard - Callsigns start with NNN0(3 letter suffix), some frequencies just outside the ham bands, either just above or just below the ham bands. The purpose of this service is to pass health and welfare and personal messages for military personnel on ships or overseas and their families.

CAP is the Civil Air Patrol, a civilian volunteer service of the U.S. Air Force, which is involved in air searches for lost people, downed or lost aircraft, assistance in storm damaged areas, surveying storm damaged areas. They have frequencies in the 4,7, 8, 14, 20 mhz ranges. Not having been a part of the CAP, that is about the extent of my knowledge and it could be dated as to frequency ranges. Hope this answers your question. 73

Ray

--

"Politicians are like nappies. Both should be
changed regularly -- and for the same reason"

Ray Colbert, W5XE,
00TC 3618, SOWP 1064M
(also af852@rgfn.epcc.edu)
El Paso, Texas

--

Ray Colbert, W5XE
00TC 3618, SOWP 1064M
El Paso, Tx (Far West Texas)
(also: v31xe@dzn.com)

Date: Sun, 18 Jan 1998 14:39:56 +0000

From: Leon Heller <leon@lfheller.demon.co.uk>
To: iapizloj@bicc00.bi.ehu.es
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [1288] Re: What CW tone do you prefer? (kinda long)
Message-ID: <BU+kzKA8Qhw0Ew4J@lfheller.demon.co.uk>
MIME-Version: 1.0

In message <34C3BC35.5EC1@bi.ehu.es>, Jon Iza
<iapizloj@bicc00.bi.ehu.es> writes

[deleted]

>P.S. 1
>Scott, NF3I, posted a long detailed study on how many "waves" per dit
>will be sent at 40 WPM for different pitches. I did get into a very
>interesting discussion with Gary Bold, ZL1AN, who writes on the NZART
>Break-In bulletin about CW, on the very subject. My hypothesis was that
>at high speed CW, the ear must have inertia problems, "starting" and
>"stopping" the eardrum with each dit or dah. Elaborating on that, I would
>say the eardrum has to pick up several "waves" to identify the signal
>amongst other signals and noise... But when you know they are
>folks around able to do 100+ WPM, the hypothesis goes down the sink...
>Reading later that on Nature, 5 Oct. 89, pp. 397-404, A.J. Hudspeth
>reported the "hair cells" from the ear can detect motions of atomic
>dimensions and respond more than 100,000 times a second... one wonders:
>How the heck can we do it?

If the auditory system was only about 2 X as sensitive (from memory),
we'd actually be able to hear the random motion of the air molecules! A
phenomenal amount of signal processing is actually going on. For
instance, the hairs have little chalk crystals on their ends, are
different lengths, and act as filters for particular frequency bands.
Also, the brain is doing something like *very* fast Fourier Transforms
using "hardware".

Leon

--

Leon Heller: leon@lfheller.demon.co.uk <http://www.lfheller.demon.co.uk>
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See <http://www.lfheller.demon.co.uk/dds.htm> for details of my AD9850
DDS system - schematic and software.

Date: Sun, 18 Jan 1998 12:14:53 EST
From: k7sz@juno.com

To: qrp-1@Lehigh.EDU, qrp@qth.net
Subject: [1289] Care and Feeding of Deep Cycle Batteries
Message-ID: <19980118.181726.6591.5.k7sz@juno.com>

OK, here is one for all you amateur chemists out there.....

I have a Sears Die Hard deep cycle battery that I have used at FD for four years and last year it saw limited service on my camper.

When recharging it at the first part of the camping season last year, it took a few days for it to come up to full charge. Then, it seemed that it would not hold a charge well, although I always had power when I needed it in the camper.

I just brought the battery in today (it was stored on my unheated front porch) and checked the cells....each cell required retopping with 3/4 cup of distilled water! Now that is a LOT of water! I can detect no cracks in the case, and the battery has never been tipped over or overcharged.

Charging was undertaken as soon as the battery was warmed up to room temp and the cells were topped off. Initially the charger drew about 3.5 amps and the charging voltage was 12.46 volts (measured with a digi VOM). After a couple of hours, the charge current has dropped to 2 amps and the charge voltage is now up to 13.66 volts, indicating that the battery is, in fact, taking a charge.

My questions are:

1. Is this battery still "good"? (I do not have hygrometer to measure specific gravity, however, the little red/yellow/green "balls" in the peek-a-boo hole on the top of the battery do change from red to green).
2. The loss of water in the cells disturbs me. I have been very careful in charging this battery in the past, and have never overcharged it. There is no charging system on the camper and I have to remove the battery or haul the charger out to the camper in order to recharge the battery. With no cracks in the case, how did I manage to lose so much water in the battery?
3. This is the second Die Hard I have had problems with. The first one only lasted a couple of years. I always thought that Die Hards were great batteries.....possibly I have been the victim of a very effective ad campaign?

73 rich K7SZ

Date: Sun, 18 Jan 1998 12:16:49 -0500 (EST)
From: "Ralph L. Irons" <rli8m@weyl.math.virginia.edu>
To: qrp-l@Lehigh.EDU
Subject: [1290] 2n2: 40 m DSB XCVR complete in VA
Message-ID: <Pine.A32.3.93.980118121155.41876A-100000@weyl.math.Virginia.EDU>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Finally, the 40 m 2n2222 double sideband transceiver is complete.

I had used the 2n2222 DSB transmitter together with my ricebox receiver for about a month, racking up QSOs in GA, MD, NH, NJ, NY, PA, RI, and WVA running one watt double sideband on 40 m, mostly in the late morning. It was time to see what a 2n2222 DSB transceiver could do.

Two weeks ago, I added a 2n2222 VFO, then last week a primitive direct conversion receiver, using a commercially packaged diode ring mixer. My first two QSOs with the transceiver were with K8OS, net control for MIDCARS, near Dayton, OH (is this an omen?) and N4SHE, the grand dame of NC hamdom, acting as net control for the 7240 club. These net control operators are used to listening for mobiles, so they have the ears needed for QRP check-ins.

A 2n2222 VFO was built using the design for a Colpitts VFO given on p. 34 of Hayward and DeMaw's SOLID STATE DESIGN, together with the buffer stage from p. 45 of the second edition of DeMaw's QRP NOTEBOOK. It's plenty stable enough for casual phone operation, even though I used silver-dipped mica caps instead of polystyrene or NPO caps. Also, I'm running the VFO at too high a voltage (about 11 V), with a seat-of-the-pants 12 V Zener regulator circuit. I should have bought a 9.1 V Zener and followed the Zener regulator design information given in SOLID STATE DESIGN (p. 156). Instead, I slapped a 12 V Zener from VFO collector to ground, put resistors in series with the collector to drop my power supply's 14 V down closer to, but still above, 12 V, until the Zener was no longer running hot to the touch. I don't know how much regulating it does, but the VFO works.

For the receiver, I built a simple direct conversion circuit, using the 2 - 2n2222 audio amplifier shown on p. 81 of Rusgrove and DeMaw's UNDERSTANDING AMATEUR RADIO. If I'd seen it earlier, I would probably have just built the mixer/audio amp circuit shown in SOLID STATE DESIGN on p. 75. As it was, I constructed a double balanced mixer (no doubt overkill for a DC receiver) in front of the audio amplifier, and it didn't work. Touching the audio amplifier input cap with my finger, I got plenty of hum, so I figured the audio amp was working. I popped in a TUF-1, a commercial DBM package, and the receiver sprang to life. Ahead of it was my 40 m low pass

filter and a simple tuned circuit (a toroid and variable capacitor resonant at 40 m) for a preselector.

Two 12 V relays from RS handle switching antenna, power, and VFO signal between receiver and transmitter. They are both activated at the same time by the push-to-talk switch.

Yesterday, I finally replaced the TUF-1 mixer with a home-brew singly-balanced mixer, to bring the rig into complete compliance with the rules of the Norcal 2n2222 competition. I was pleased to find that the local broadcast station harmonic which appears at about 7 MHz was no longer smeared across the whole CW subband, as it had been with the TUF-1. (I'm probably driving the TUF-1 with the wrong amount of VFO signal.) On the other hand, the 60 Hz hum is much louder. Powered by a battery, it sounds great!

By a happy coincidence, the phone portion of the NA QSO Party was in progress when the receiver came to life yesterday morning. Between taking my son to his basketball game and helping him with his pinewood derby entry for cub scouts, I worked stations in PA and VA. Then, just before taking the whole family to see an 8:30 - midnight showing of TITANIC, I braved the roaring surf of nighttime 40 m QSB to work NH and NY. NA QSO Party stations run under 150 W, so it was a reasonable test of the rig's performance.

I can't wait for my next chunk of vacation time (Spring Break at UVA). A project like this makes me want to try many other things -- a properly designed Zener regulator for the VFO, different VFO output levels, input filters for the receiver, 60 Hz filters for the power supply, adding CW capability, matching stages in the transmit chain, ...

Thanks again, NORCAL!

72, Ralph N7RI
Charlottesville VA

Date: Sun, 18 Jan 1998 09:19:39 -0800 (PST)
From: Monte Stark <ku7y@sage.dri.edu>
To: Bob Roach <KE4QOK@worldnet.att.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [1291] Re: Keyer wiring convention

Message-ID: <Pine.SUN.3.90.980118091717.13464G-100000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Bob,

Yes, there is a wiring convention but it all depends on which mfg you ask!! Some even differ from model to model.

The only thing I have seen really common is the ground connection! I have never seen that go to tip or ring!

I have a DPDT switch in my wires going from the paddles and just flip it to match whatever it's plugged into.

cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Sun, 18 Jan 1998 11:24:08 -0600
From: "Roger Whitaker [K9LJB]" <k9ljb@iname.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1292] Re: FOX: Fox Hunt Results W2MBY
Message-ID: <34C23AB8.EA2CF08A@iname.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

John, it was a tough night in Illinois, too. I had an intermittent S3 - S5 Qrn level here, but it did let up long enough for me to hear your QSO with AB7MY at 01:45.T that time you popped out of the noise and were 569! for a while, He was about 329 here without a DSP. By the time that QSO was over, the noise came back so I went without again. BTW your QSL for the frist one is on its way Friday. Tnx QSL, John.

72

--

Roger B. Whitaker K9LJB QRP-1 #1403

Remember it's nice to be important,
but it's more important to be nice.

Home page: <http://www.cityscape.net/~whitaker/>

Date: Sun, 18 Jan 1998 09:31:59 -0800 (PST)
From: Monte Stark <ku7y@sage.dri.edu>
To: "Mike W. Burger" <mike@krypton.nmr.hawaii.edu>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1293] Re: qrp rtty
Message-ID: <Pine.SUN.3.90.980118092903.13464H-1000000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sat, 17 Jan 1998, Mike W. Burger wrote:

>
> RTTY has come a long way since I bashed about with Model 15's and one
> tube "converters" in the early 1960's.

Gee Mike,

We could only dream of things like Model 15's back in the early 50s!
Ahhhh, all the fun of loop supplies and etc. Seemed like pure magic
to see/hear one of the old Model 12's run!

No, I never had one.....cost more money than a poor high school kid
could afford but did go watch them when I could!

cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada.....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Sun, 18 Jan 1998 11:34:16 -0600
From: "Roger Whitaker [K9LJB]" <k9lj@iname.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1294] LDE for e-mail..

Message-ID: <34C23D17.8380E09@iname.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bill, take a look at the complete header for your 12-19-97 message that just showed up on the list. It looks like the server.

Received:

from fresno.gov (fresno.netasset.com
[207.126.68.131]) by nss4.cc.Lehigh.EDU
(8.8.8/8.8.5) with SMTP id BAA53582 for
<qrp-1@lehigh.edu>; Sun, 18 Jan 1998
01:15:31 -0500

Received:

from psnw.com ([10.1.27.6]) by
argon.fresno.gov; Fri, 19 Dec 1997 07:00:16 -0800

It looks like "argon.fresno.gov" may be the culprit. Your tax dollars at work!

72

--

Roger B. Whitaker K9LJB QRP-1 #1403

Remember it's nice to be important,
but it's more important to be nice.

Home page: <http://www.cityscape.net/~whitaker/>

Date: Sun, 18 Jan 1998 10:50:25 -0700
From: Andy Fox <foxes@theriver.com>
To: k7sz@juno.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [1295] Re: Care and Feeding of Deep Cycle Batteries (long)
Message-ID: <34C240E1.D4@theriver.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Rich,

I ran a Solar Electric company for about five years, and found out a few

things about batteries in the process.

Lead-Acid Deep-Cycle batteries will self discharge about 1% per day, if left disconnected from any load.

For maximum life span, don't discharge below 50% capacity. These batteries do not have any sort of memory effect (actually, most NiCd batteries don't either). Basically, if it's a 70 Ampere-Hour battery, try not to discharge below 35 AH.

The cells will "sulfate" if they are not charged and discharged. Lead sulfate forms on the surface of the plates. This is bad news. Opinions vary, but I'm a believer in "equalizing" the cells every now and again. For a remote home, where the battery is in constant use, this should be done about once every month to three months. Another phrase for "equalizing" is overcharging. It basically knocks (most of) the lead sulfate off the plates, which falls to the bottom of the cells.

The amount of charge the battery will take is dependent upon the usable surface area of the plates, among other things. One good way to reduce the surface area (remember, this is bad) is to allow the electrolyte to drop below the tops of the plates. You'll never get that capacity back, even after topping the battery off again.

The level of the electrolyte will change when the battery is charged and discharge. It is highest in the cells when fully charged, and drops slightly when the battery is discharged. The concentration of Sulfuric Acid goes from highest to lowest at the same time. When the battery is completely discharged, the electrolyte is essentially water. The battery will tolerate cold better when fully charged. It will freeze, and be destroyed if you get it cold enough. Best temp is 65 to 75 degrees Fahrenheit.

If the battery has been discharged, add just enough distilled water to cover the tops of the plates, then charge. The electrolyte level will increase when you charge the battery. Do not fill the cells to the top before charging; you'll get electrolyte spewing from the caps!

To answer your questions:

1. The battery may or may not be shot. Try several discharge/charge cycles before making the determination. Don't discharge the battery at greater than C/20 - that is, the current drawn shouldn't be more than 5% of the Ampere-Hour capacity of the battery. Assuming 70 AH, C/20 is 3.5A. For normal (non-100% duty cycle) use, higher rates are OK, but when discharging for discharging's sake, don't exceed 5%.

2. It sounds like the battery has been allowed to sit for long periods

of time. This allows self-discharge, and shortens battery life.

3. The first and second batteries were probably treated the same way, so it doesn't surprise me that they behave the same way. My preference for deep-cycle batteries is Trojan. They are great, period.

Hope this helps. I've tried to keep this short, but have failed. There's lots more to know about these batteries. The single best source for battery information, and renewable energy in general, is Home Power magazine. They have a website at:

<http://www.homepower.com/hp/>

These people are experts, and have lived with the things they write about for decades.

Good Luck, and be careful with those batteries! Shorting the terminals of a T-105 (6V, 220AH) battery will give you 6,000 to 8,000 amperes long enough to melt whatever you shorted them with!

73 de KK7HV

Date: Sun, 18 Jan 1998 10:07:56 -0800
From: dave_epps@juno.com
To: qrp-1@Lehigh.EDU
Cc: edna-epps@juno.com
Subject: [1296] iron-on pcb
Message-ID: <19980118.102054.11358.1.dave_epps@juno.com>

I tried to thank each of you that responded to request for help in finding a distributor for iron-on paper for pcb, but may have missed someone so am thanking all of you now. This reflector is great.
 tks dave ab5pc fresno, ca

Date: Sun, 18 Jan 1998 13:27:59 -0500
From: "\"W. Kimura\"." <W.Kimura@valley.net>
To: qrp-1@Lehigh.EDU
Subject: [1297] Re: outback make-do antennas
Message-ID: <199801181827.NAA20309@norwich.valley.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Brings new meaning to the term "antenna farm" !

At 08:55 AM 1/17/98 EST, you wrote:

>And then there was the time we backpacked into some 80 foot tall Mississippi
>virgin pines...forgot my antenna...remembered QST "Army Antenna" Article of
>1950's...had to make do with using a couple of rusty nails with rust scraped
>off...loaded up the evergreen pines...tuned pinetree antenna by sawing off
>lower limbs to lessen ground effect capacity and to create directivity and
>gain...and worked US and DX stations alike. Worked like you wouldn't believe.
>But that's another story
>Bill, K5BDZ
>
>

Date: Sun, 18 Jan 1998 11:00:27 -0700
From: Steve Galchutt <n0tu@webaccess.net>
To: "\"Low Power Amateur Radio Discussion\"" <qrp-1@Lehigh.EDU>
Cc: k7sz@juno.com
Subject: [1298] Re: Hamstick=Bugcatcher Lite (long)
Message-ID: <34C2433B.1934@webaccess.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Ok...enough of you wanted to know some details...Here there are:

But first let me give credit where it's due. Being cheapo and not wanting to 'buy' a good mobile signal for 300+ dollars ...I figured I'd built one. So, I looked at Cecil Moore/W6RCA's Homebrew Bugcatcher @ (<http://people.delphi.com/CecilMoore/bugcatch.htm>) and came up with a lighter weight version of same(BC/lite) made from a hamstick...it might be lighter weight on the performance side too, compared to Cecil's. I didn't use the 8' whip but the 45" one that came w/hamsick. And my coil is "non-Quaker Oats" size and probably not as high a Q as Cecil's! But it's a heck of an improvement over the 1/2" lower Q original hamstick coil. (Please don't misunderstand...I not knocking the hamstick...it is good product for what it "is"! A low profile 'XYL-approved' mobile antenna. And it does radiate! Enough said.)

Basically, I used Cecil's idea to get me started.(Thanks for sharing it, Cecil!)

Hamstick to Bugcatcher Lite conversion details:

Take a your least favorite or least useful hamstick and peel off ALL the heatshrink tubing from base end to the whip end-cap(the little gizmo that holds the adjustable whip)...Behold lots of wire for winding toroids. Before removing it read on...You have several choices on how to make connection to the base of the coil which will be mounted on the fiberglass rod just below the whip. You can cover the fiberglass rod w/copper braid, use the "small" wire already attached at the base running it up to the coil, or maybe even use copper foil tape. (another suggestion was aluminum tubing... I'm experimenting w/the small wire for now but plan on going w/the copper braid idea ASAP!). Later you may want to reapply some new heat shrink tubing over the mast. Which ever you decide on keep in mind reducing ohmic losses here...pays off in signal strength from what I've read and heard.

So, remove the wire from the fiberglass rod carefully leaving a about 2" (more like 48" if your going to use this wire to attach to the coil) of wire attached to the brass stud-base. Same thing on the whip anchor cap at the end of the fiberglass rod. Remove the end cap by slowly heating up the cap w/soldier iron. This will loosen the epoxy glue. Hold the fiberglass rod gently with vise gripes and rag or ? With pliers gently twist/pull the end cap off. Set aside for later...don't loose it!

Coil is next! Find a coil or make one. I found several at the hamfests and friends junk boxes. Decide on lowest band of operation. The ARRL Antenna Handbook says you need approximately 40uH of inductance for a center loaded 8' moile antenna for 7.2Mhz. The Radio Amateur Handbook has coil data in it for figuring out how much inductane is in a any given coil. Coil stock is scarce and hard to find. Making one is not that difficult.

There are posts and articles describing the process. Since I had several different coils already I won't describe making one. Mounting the coil is next...

My coil was 2.5" inside diameter. I cut 2 small disks of Lexan (plexiglass will work) to be epoxied horizonally inside the coil between all the coil's vertical support rods. I drilled a hole in the center of these disks large enough to fit nicely(not too loose! more towards...snug) over the fiberglass rod! The disk can be round or square the idea is to support the coil firmly while not adding to much wight. I mixed up some 5-minute epoxy and glued the disks to the inside of the coil at both ends anout 1/2" in from the ends one at a time. I used a tooth pick and yakitori skewer stick to get at the back side of the disks w/epoxy. After the epoxy is setup I slid the coil down the fiberglass rod. Top of the coil stops 3" below the the end of the rod. Before re-installing the whip end-cap and soldier the top end coil wire to this brass end-cap where the original wire was attached. Then epoxy the cap end to the rod. (NOTE: I haven't glued mine yet as I'm still

fine tuning things)

I noticed Cecil used cable tiewraps to act as stoppers to hold his coil in place. Worked for me too! I also added the short lead w/alligator clip to tap my way around the band. (sounds like a Broadway show) W

Well...that's it for now. I leave you where I am ...having the fun of 'tapping' my way to a find resonate points and testing it out. And maybe to make more modifications...Let me know what you come up with if you should decide to do the conversion. At least it seems to work "better" than the original and is about the same weight perhaps having a little more wind resistance. And it's not a XYL pleaser...but lifes to short for low effeciency antennas.

I'll get some pics of this BC/Lite up on my website soon.....Steve

CUL Steve/n0tu . .

Solar powered QRP/CW

"Camping" in Monument, CO....email:N0TU@webaccess.net

Date: Sun, 18 Jan 1998 13:56:20 -0500 (EST)
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
To: towertalk@contesting.com, antennas@qth.net, QRP-L List <qrp-l@Lehigh.EDU>, gqrp-l@blacksheep.org
Subject: [1299] a bit more old and new
Message-ID: <Pine.SOL.3.94.980118084500.3991K-1000000@moe>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I have placed another FDIM talk, the one scheduled for the 1997 meeting, which I had to miss, but which I gave at Huntsvillle last August, on the web site. Called "Wi're We Using Wire" and covers some basics that summarize some of the articles in the series I do for Low Down called "Antennas From the Ground Up." (Been using that title since long before an article appeared in one of the GB journals with the same title.) This one covers the basics of single and multi-band straight wire antennas. A couple of links to compendiums of multi-band patterns are not yet in place, although the links to the 135' and 102' antennas are good.

Hope the item is useful or entertaining to someone.

LB, W4RNL

L. B. Cebik, W4RNL	/\	/\	*	/	/	/	(Off)	(423)	974-7215
1434 High Mesa Drive	/	\	\	/	----	/\	(Hm)	(423)	938-6335
Knoxville, Tennessee	/\	\	\	\	/	/	(FAX)	(423)	974-3509
37938-4443 USA	/	\	\	\					cebik@utk.edu
URL: http://funnelweb.utcc.utk.edu/~cebik/radio.html									

Date: Sun, 18 Jan 1998 12:32:03 -0700
From: gsurrency@juno.com (Gary L Surrency)
To: qrp-l@Lehigh.EDU
Subject: [1300] W2MBY Fox
Message-ID: <19980118.124655.11934.1.gsurrency@juno.com>

Yes John, you were basically unreadable. ;-)

I could just get a dit or dah here and there, but after enough repeats we bothe finally got the entire exchange.

One of the street lights in my area was also coming on and off, contributing it's QRN to the already horrible noise.

The hardest part of the entire exchange was trying to determine when you had stopped transmitting so I could start. This had to be one of the most difficult Q's I have ever had, if not the most difficult of all time. But we *did* accomplish it.

I think we were both using ESP and detecting the change in noise level, not the actual CW tones, much as Ade W0RSP mentioned in an earlier post.

Thanks for the great effort, and all other QSO's from here onward should now be a proverbial piece-o'-cake. :-) :-)

72,

Gary Surrency AB7MY
S&S TAC-1(40&80m) ARK30 38S OHR100 w/KC-2 HW-9 TS-570D
QRP-L #571 Chandler, AZ (near Phoenix)Grid Square DM43BH

Date: Sun, 18 Jan 1998 14:01:25 -0600
From: "Terry Bassett" <mutabut@net66.com>
To: <Qrp-L@Lehigh.EDU>
Subject: [1301] Knob twister's special
Message-ID: <01bd244b\$dbd728a0\$d25e8bce@host.net66.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello All,

I just did three of the modifications for the OHR SCAF from the winter '97 Qrpp.

One revision that was helpful for my situation was to substitute a 1- pole, 12 position rotary switch (RS Part #275-1385a) for the 1 pole, 8 position switch mod on page 71, from David Snowdon, VA3DKS.

I use my filter at night with headphones while I am supposed to be sleeping. Without a dial light, I kept twisting the knob too far. Then I would have to tighten it the next day, being too lazy to go get the jeweler's screwdriver set to fix it at night. The twelve position switch lets me go from 2440 to 108 and keep on going on around to 2440 again without losing audio and I shouldn't have to worry about twisting the knob loose again.

My \$0.02 cents worth...

73,

Terry, KA9TXE

Date: Sun, 18 Jan 1998 22:02:23 +0200 (EET)
From: "Arjen Raateland, FEI/Impacts Research" <Arjen.Raateland@vyh.fi>
To: qrp-l@Lehigh.EDU
Subject: [1302] preventing destruction of gel cell?
Message-ID: <01ISJDX0JYW28Y8HB3@vyh21.vyh.fi>
MIME-version: 1.0
Content-type: TEXT/PLAIN; CHARSET=US-ASCII
Content-transfer-encoding: 7BIT

I have just destructed another gel cell by discharging it completely. The charger was connected, but the mains socket is a loose fit and the plug fell out during my one week absence. It doesn't usually do that, but this time it did The battery doesn't seem to take any charge

any longer, the voltage stays at ca. 6 to 7 V.

There was an article in a German magazine (ELV Journal 5/95 p. 52) once about an circuit that disconnects the load automatically if the battery voltage gets below a threshold. It used a ****latching**** relay with two 16 A contacts and some other components. Latching relays are hard to find especially with that specification, but it was sold as a kit, too. It might be a solution as it uses only 1,5 mA.

What do you people use to protect your batteries against the occasional mistake? The gel cell type of battery is a kind of unforgiving, it seems. The particular battery was 12V at 6,5Ah and it costs about 30 dollars.

How do you monitor the battery voltage? I use a circuit with an LM3914 and some LEDs and that works, but it also discharges the battery in the long run. Only one/two LEDs are on at any one time, but that is still a lot of current if it lasts long without a charger.

Thanks for reading this.

Arjen Raateland

Finnish Environment Institute, Helsinki, Finland
SAS Support
EMAIL: Arjen.Raateland@vyh.fi
tel. +358 9 4030 0457
fax +358 9 4030 0490
.-.-.-.-

Date: Sun, 18 Jan 1998 12:41:14 -0800
From: Monte Stark <ku7y@sage.dri.edu>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [1303] Re: outback make-do antennas
Message-ID: <34C268EA.7604@sage.dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

> ...forgot my antenna...remembered QST "Army Antenna" Article of
> >1950's...had to make do with using a couple of rusty nails with rust scraped
> >off...loaded up the evergreen pines..

Hmmmm, bet it was an April issue!

--

73, Ron, KU7Y

NRA Life-----Ex W6JX0, DL4RF, N7CRV-----SOWP #5545-M
QRP QRCI #8829----NorCal #330----QRP-L #17-----ARS #49
AR QRP #150-----DM09cg-----New Washoe City, NV

Date: Sun, 18 Jan 1998 12:58:42 -0800 (PST)
From: "S. Lee" <slee@u.washington.edu>
To: "Arjen Raateland, FEI/Impacts Research" <Arjen.Raateland@vyh.fi>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1304] Re: preventing destruction of gel cell?
Message-ID: <Pine.A41.3.95b.980118123804.35532E-100000@homer22.u.washington.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

You can build a latching relay by utilizing a double pole single throw relay. Wire a momentary switch in parallel with one set of normally open relay contacts then wire this one set of normally open contacts in series with the relay coil. Apply power and press the momentary switch. The momentary switch will cause the relay coil to pull in the relay. The relay's contacts, once closed, will hold the power to the relay coil. Should power drop out for any reason the relay will de-energize and remain in that condition until the momentary switch is again pressed. Wire the unused relay contacts in series with the battery charging lead. With the relay energized the battery charges. When AC power drops out the relay de-energizes thereby disconnecting the charging lead from the battery...no completed circuit = no discharge path.

A simpler approach would be to connect the relay coil across the AC input of the charger. Use the relay contacts to control the charging circuit to the battery. When the power plug falls out then the charging circuit breaks.

Enjoy! de AB7HI, Stephen Lee, Federal Way, WA
slee@u.washington.edu

Date: Sun, 18 Jan 1998 16:10:53 EST
From: KB9RPD <KB9RPD@aol.com>
To: qrp-l@Lehigh.EDU
Subject: [1305] Books to Learn from

Message-ID: <8e865b6c.34c26fdf@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Well, I want to thank everyone for their encouraging words! I received a very nice email from Wes, W7ZOI, about the personal side of Doug DeMaw. If you can say you had a role model in this hobby, I would like mine to be Doug. There were probably MANY people like Doug out here in the hobby! That's what makes amateur radio so GREAT! I don't know of too many other hobbies where people are so willing and anxious to share experiences and knowledge! I'm glad I'm a part of it.

Bruce Muscolino recommended a couple books by Doug DeMaw. Because I don't have any kind of background in electronics, I want to learn as much as I can about electronics in general and about design. Thanks to Bruce for the recommendations. Does anyone else have recommendations for "newbies" such as myself on electronics in general and electronic design?

Thanks!

73, Ted - KB9RPD

Date: Sun, 18 Jan 1998 15:30:51 -0600
From: "C.D. Rakes" <cdrakes@ipa.net>
To: <qrp-1@Lehigh.EDU>
Subject: [1306] S&S TAC-1 QRP rig.
Message-ID: <199801182124.PAA27039@thunder.ipa.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

I'm new to the list, and am just getting back into ham radio and qrp operation. Looking for some advice and related experience that any of you have had with the S and S eng. line of QRP equipment. I'm thinking about ordering one of the TAC-1 on 80M, and would like your comment.

You may e-mail me direct at cdrakes@ipa.net

Thanks, Charles KI5AZ

Date: Sun, 18 Jan 1998 13:29:45 -0800 (PST)
From: Stanley Wilson <microres@crl.com>

To: KB9RPD <KB9RPD@aol.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [1307] Re: Books to Learn from
Message-ID: <Pine.SUN.3.91.980118132617.6896B-100000@crl8.crl.com>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

The ARRL amateur radio handbook.

Buy a current copy and also try to find one from the 60's or 50's so you also have a good tube reference.

I could recommend several engineering books, but for the price you can not bet the above. You should be able to pick up both of the above for \$50 or less.

de stan ak0b

Date: Sun, 18 Jan 1998 16:45:57 -0500
From: Hank Kohl K8DD <k8dd@contesting.com>
To: Arjen.Raateland@vyh.fi
Cc: qrp-1@Lehigh.EDU
Subject: [1308] Re: preventing destruction of gel cell?
Message-ID: <3.0.1.32.19980118164557.00d2b10c@192.0.0.1>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 10:02 PM 1.18.98 +0200, you wrote:

>I have just destructed another gel cell by discharging it completely.
>The charger was connected, but the mains socket is a loose fit and the
>plug fell out during my one week absence.

Assuming the battery discharged through the charger.....

```

LOOSE PLUG
  TO A.C.
    I I
    I I
+-----+
I  CHARGER  I
+-----+
```

```

POS    NEG
I      I
I      I      DIODE      +-----+
I      +-----I<I-----NEGI      I
I      I      BATT. I
+-----POS I
      +-----+

```

Diode cathode to the charger. Diode has current rating 2 - 5X the maximum charging rate (safety factor) and a 50v rating.

You might have a small voltage loss across the diode, but that seems a small price to pay for a deceased battery.

One of many possible solutions.

73 Hank K8DD

```

*/      Hank Kohl  K8DD      k8dd@contesting.com
*/      ARRL TS      (k8dd@tir.com)
*/      MI-QRP - Vice Pres.  QRP-ARCI - Director
*/      G-QRP      ARRL/LM      QCWA/LM      QCAO/LM

```

```

-----
Date: Sun, 18 Jan 98 17:10:55 EST
From: Joel Malman <malman@BBN.COM>
To: qrp-l@Lehigh.EDU
Cc: wa1qvm@BBN.COM
Subject: [1309] 6 meter QRP fun
Message-ID: <199801182211.RAA98142@nss4.cc.Lehigh.EDU>

```

Folks,

Tried my first VHF contest this weekend. The ARRL VHF SS --- they don't have a QRP class, but working SSB on VHF with just a few watts is just about the same amount of fun as working an HF contest, QRP SSB.

I used a TenTec transverter (20m SSB to 6m SSB) that I bought used from a list member (thanks, Bob). It will also work CW, but I only heard one CW signal (Emil -- W3EP), but he did not hear me.

I don't have a 6 meter antenna tuner or antenna, so I just connected the output of the transverter to my MFJ HF antenna tuner and tried to match the antenna to the transverter using the 12 meter setting (sort of 50% of 6 meters) to my G5RV (up in the trees). To my surprise I got a pretty good match.

Indeed the antenna match turned out to be good enough to work about 50 Q's without much effort. I was easily able to work NH (about 50 miles away) and a few RI stations (about 75 miles away) ... the local MA contacts were really easy -- remember now, I don't have a 6 meter antenna.

Oh well... just another way to enjoy working QRP.

72

/joel wa1qvm wa1qvm@bbn.com (QTH: Concord, Massachusetts)

Date: Sun, 18 Jan 1998 05:19:37 -0500
From: Paul Helbert <phelbert@rica.net>
To: "tentec@contesting.com" <tentec@contesting.com>, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1310] Ten Tec AC 5 QRP Tuner
Message-ID: <34C1D739.B6691DB2@rica.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Gangue,

Just got back from Richmond (VA) Frostfest with a couple of goodies. No manual for either one.

First is the Ten Tec AC 5 balanced QRP tuner. I presume the unit never had a top cover since the jumpers would need to be accessible for operation. What is the correct positioning of the red and blue wires? If anyone has a manual (probably one page) I'd sure appreciate a copy.

Second is a Model HD-15 Heathkit hybrid phone patch. Need operating instructions there also. Never used any phone patch before. There are "line" terminals on the back...what line do they mate? My guess would be 120 VAC. A copy of the manual would be appreciated here also.

Please don't go out and photocopy without letting me know. I don't need but one of each!

Thanks,

Paul, Wv3j

Date: Sun, 18 Jan 1998 17:28:03 EST
From: kf2ew@juno.com (David M Kopacki, Sr.)
To: mgipe@reliablemeters.com
Cc: qrp-1@Lehigh.EDU
Subject: [1311] Re: Notched NorCal K8FF Paddle Handles
Message-ID: <19980118.171813.2719.0.kf2ew@juno.com>

The easiest way is to just hold and guide it on a bench grinder. It's fast and a lot smoother. You can almost get the final shape this way.

Mike Kopacki, KF2EW

On Fri, 16 Jan 1998 08:44:17 -0800 "Michael A. Gipe"
<mgipe@reliablemeters.com> writes:
>The best method is to clamp them together in a vise and file the
>corner off.
>I also found it useful to glue the two plastic pieces together with
>wood
>glue. Leave the paper covering in place, of course, until you are
>finished
>shaping, then peel to separate the pieces.
>
>You can use a hacksaw to rough cut the shape if you are impatient, but
>the
>plastic can be shaped pretty quickly with just a file.
>
>Whether you received four-sided or five-sided plastic pieces, you will
>need
>to shape them before using them. The rectangles give you more freedom
>of
>choice for the final shape.
>
>Mike K1MG
>
>>When I received my paddle kit a while back, the paddle handles came
>without
>>a "notch" on the corner. I remember a message thread about this and
>I am
>>wondering how I might be able to get a set of these. Thanks!
>

>
>
>

Date: Mon, 19 Jan 1998 00:35:27 +0200 (EET)
From: "Arjen Raateland, FEI/Impacts Research" <Arjen.Raateland@vyh.fi>
To: qrp-1@Lehigh.EDU
Subject: [1312] preventing destruction of gel cell?
Message-ID: <01ISJJ3HTEY28Y8HB3@vyh21.vyh.fi>
MIME-version: 1.0
Content-type: TEXT/PLAIN; CHARSET=US-ASCII
Content-transfer-encoding: 7BIT

I'd like to add a comment to my earlier question. The battery was discharged by a genuine load connected to the battery. The charger has a built in series diode and very little current is drawn by its voltage sensor divider (it's a UC3906 application). The charger was in 'float' mode intended to use the battery as a power-out back-up for a limited amount of time (not a whole week). Power-outs are very rare here and have never lasted long.

Several people assumed it was the charger itself that acted as a load once the AC power was missing. My home brew charger cannot draw current from the battery, only supply it.

I obviously need to automatically disconnect the load in case the battery voltage drops below the limit. I have one circuit design to do this, but the relay used is 'awkward'. I was just wondering if some of you you have experienced battery failure because of inadvertantly discharging the battery too much and what you do to prevent this kind of damage. Most of you probably won't feel the need for any such preventive measures, because the rig will tell if the battery is low and it isn't on all the time, but somebody may have a good bit of information anyway.

73, oh2zaz.

Arjen Raateland

Finnish Environment Institute, Helsinki, Finland
SAS Support

EMAIL: Arjen.Raateland@vyh.fi

tel. +358 9 4030 0457

fax +358 9 4030 0490

..-.-.-

Date: Sun, 18 Jan 1998 14:49:45 -0800
From: Monte Stark <ku7y@sage.dri.edu>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [1313] NA Sprint
Message-ID: <34C28709.2305@sage.dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi All,

Just a reminder that the NA Sprint is comming up on the 8th of Feb. This is the CW Sprint. 0000z till 0359z, 8 Feb 98.

They have agreeded to handle QRP entries the same as a class! This is a big step for the contest people to do and I'd sure like to see lots of entries!

Don't worry about how many you work. Just work some and send in your score.

This is THE contest for those of you that don't think staying on one frequency and calling CQ for the whole contest is a real challange. This contest doesn't let you do that.

You can call CQ until you work a station. Then you MUST leave that frequency to find someone else! The station that called and worked you now "owns" the frequency until he works a station. Then he must move and the other fellow has the freq!!

The rules are at:

<http://www.waterw.com/~ncj/sprint.html>

This is a fun contest. Please be sure to get on and give it a try. Only 80, 40 and 20m can be used.

Thanks for the BW and lets make this first Sprint to recognize QRP one for them to remember!!

We are also forming teams. If you'd like to be part of a team, send me an e-mail. We must give team members to the contest people prior to the start of the contest.

cul,

--

73, Ron, KU7Y

NRA Life-----Ex W6JX0, DL4RF, N7CRV-----SOWP #5545-M
QRP QRCI #8829----NorCal #330----QRP-L #17-----ARS #49
AR QRP #150-----DM09cg-----New Washoe City, NV

Date: Sun, 18 Jan 1998 17:54:36 EST
From: k7sz@juno.com
To: ku7y@sage.dri.edu
Cc: qrp-l@Lehigh.EDU
Subject: [1314] Re: outback make-do antennas
Message-ID: <19980118.235745.6591.9.k7sz@juno.com>

On Sun, 18 Jan 1998 12:41:14 -0800 Monte Stark <ku7y@sage.dri.edu>
writes:

>> ...forgot my antenna...remembered QST "Army Antenna" Article of
>> >1950's...had to make do with using a couple of rusty nails with
>rust scraped
>> >off...loaded up the evergreen pines..
>
>Hmmm, bet it was an April issue!

Actually British SAS used "tree" antennas in Malaysia. When I was
stationed at RAF Mildenhall in the early 80's I met a former SAS officer
who went to our church. He and I had some interesting discussions, one of
which was the SAS' use of trees as antennas as opposed to using wire
strung in trees. The efficiency sucked, but it was better than taking the
time to string wire.

I understand that our Special OPs folks now use something called "spider
wire" for antennas on-the-run, so to speak.

73 rich K7SZ

Date: Sun, 18 Jan 1998 13:58:52 -0900
From: "Jim (AL7FS), Nancy (KL7NY), Juliann (WL7MP) & Issei" <larsennc@alaska.net>
To: qrp-l@Lehigh.EDU
Subject: [1315] AL7FS has fun today.
Message-ID: <34C2892C.5A02@alaska.net>

MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Well, I had fun today. I was on the air for about an hour and worked five stations. Several were 229-339 challenges but by trying hard we finished up in 8-10 minutes. Fun, you say? Yep!

Between 2100 and 2200Z worked:
N2TO Kevin in NY - 1st AK QRP - Congrats!
WD4EKB Dave in NY - 1st AK QRP - Congrats!
Dave said he had been trying for AK for 4 years.
N3LAZ Don in PA
N9MDK Greg in IL
VE3ABT Des in Canada

I should do this more often.

There were others calling, I think but I ran out of time and the band was changing.

Oh, tuning around really pays off. Don was up 400 and Des was up 700 from my frequency. I had a 500 hz filter in line but RIT tuned up and down 1000 Hz.

73, Jim, AL7FS
--
Jim Larsen
Acupressure Anchorage
Anchorage, Alaska

Date: Sun, 18 Jan 1998 18:23:05 EST
From: N3BJ <N3BJ@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [1316] One tube transceiver from the 60's ???
Message-ID: <4b2bfb8a.34c28edb@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Anyone remember this thing ?? Used one tube - 1/2 for a regen RX and half for a xtal TX. It was a commercial offering, I believe. Would be interesting to bring this back and homebrew it.

Alan, N3BJ
Bent Mountain, VA

Date: Sun, 18 Jan 1998 19:31:40 -0800
From: Terres Family <terresfm@ncia.net>
To: qrp-l list <qrp-l@Lehigh.EDU>
Subject: [1317] Portable op
Message-ID: <34C2C91C.41FA@ncia.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi,
I have a friend who is looking for some advice:

He is an extra class who is interested in QRP and travels to and works in Sweden. He had no luck there on 2 meters(almost no activity) and the band allocations are more restricted than here: 1.81-1.85, 3.5-3.8 7-7.1; no 30 meters but 20 is the same. [He is also going to call SSA(Sweedish ARRL).]

So he's looking for something portable "in the 1-6 watt range." There had been a thread about best backpack rigs and it seemed to boil down to a Sierra if you wanted to work more than 2 bands and a single band rig(s) if only one or two bands. But I wasn't sure if there was any consensus on single band rigs? Emtech, 40A, Small Wonders, Ten Tec, OHR...

He has seen my Rainbow-Tuner but other than small size I'm not sure it would meet his needs. The list has had good things to say about the ZM-1. I don't see the ZM-2 on the Emtech page but seems like it would get the nod.

A compact portable hf antenna is a problem. He sent me a copy of a '73' 9/86 article, Ramada Radiator, a vertical made from a Slinky. Has anybody tried this? I had read something about slinky dipoles once and got the impression that they did not work that great. Would pack up small though. Other suggestions?

He said airport security never takes a second look at his 2 meter rig as it looks like a mobile phone. So maybe that's a consideration too.

Thanks
Jerry AA10F

Date: Sun, 18 Jan 1998 18:36:36
From: "Gary M. - W2UX" <mail4gary@worldnet.att.net>
To: qrp-l@Lehigh.EDU
Subject: [1318] Two Old Electr. Books - Handbook and Data Book -Not QRP but...
Message-ID: <3.0.3.16.19980118183636.37d7fece@postoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

HI Gang,

A friend of mine has two old electronics books and asked me to find out if there was any interest by my friends to purchase them. He has the following:

Radio Handbook, 9th Edition, Nov. 1942

and

Radio Data Book, 1948, by Boland and Boyce.

Any interest?? Please email me and I will negotiate for you. Give me your offers.....

Thanks.

=====
72/73 de W2UX
Gary McCaughey
Lexington, SC
CW is the REAL THING!
Use it....or lose it.
QRP-ARCI QRP-L CQC
=====

Date: Sun, 18 Jan 1998 16:38:55 -0700
From: tom whalen <whalen@swcp.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1319] Antenna testing
Message-ID: <34C2928F.1B0F@swcp.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello Fellow Qrpers!!

Just returned from the mesa south of Albuquerque, where my son and I went out to ride motorcycles, shoot the spud gun, and play antennas....what a GREAT combo!!

Did some testing with the spud gun, and sure wish there were some trees around so I could practice getting a line over the tree. Nearby, there was some huge power lines that I could have used but decided against that...of course! I think Jay, WA5WHN knows the area I'm talking about...We used to drag race out there when we were younger! Of course, Jay and I never used to drag race...right Jay?

I built a hf mobile antenna called the "Copper Monster". It consists of a 7 foot center loaded, slider tuned 80-20 m antenna. The entire antenna is made out of copper pipe and wire. I did have to use some pvc for the coil form. Got about 20 bux in it and is going to show some promise...lil on the heavy side though!

Got some real strange looks today from passersby, between the spud gun and my copper antenna!!

Sure had a nice day here in Albuquerque, temp about 60 and real nice. I also brought along my kite to try a kite antenna, but ran out of time. Had a blast!!! 72, Tom WB5QYT "Have spud will travel!"

Date: Sun, 18 Jan 1998 06:39:47 -0500
From: Paul Helbert <phelbert@rica.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>, "tentec@contesting.com" <tentec@contesting.com>
Subject: [1320] Line=phone not 120 VAC
Message-ID: <34C1EA03.C8A2B278@rica.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Thanks, gangue. The "line" connection in the phone patch is for the telephone. I should have known that. I did not yet hook anything to it, so have not smoked it as 120 VAC would surely have done.

Looks as if I have located a manual for the Heathkit phone patch and will be able to get the tuner going by messing around with it. It never had a cover, as I suspected. I still would appreciate any settings for the AC 5.

Thanks,

Paul, Wv3j

Date: Sun, 18 Jan 1998 15:48:53 -0800
From: Monte Stark <ku7y@sage.dri.edu>
To: QRP-L <qrp-l@Lehigh.EDU>, Werner Jochem <Werner.Jochem@hoexter.netsurf.de>
Subject: [1321] Re: NA Sprint
Message-ID: <34C294E5.CC1@sage.dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi All,

Try this URL. The last one doesn't seem to work!

<http://www.waterw.com/~ncj/>

Thanks,

--
73, Ron, KU7Y

NRA Life-----Ex W6JX0, DL4RF, N7CRV-----SOWP #5545-M
QRP QRCI #8829----NorCal #330----QRP-L #17-----ARS #49
AR QRP #150-----DM09cg-----New Washoe City, NV

End of QRP-L Digest 974

